FIG. 1

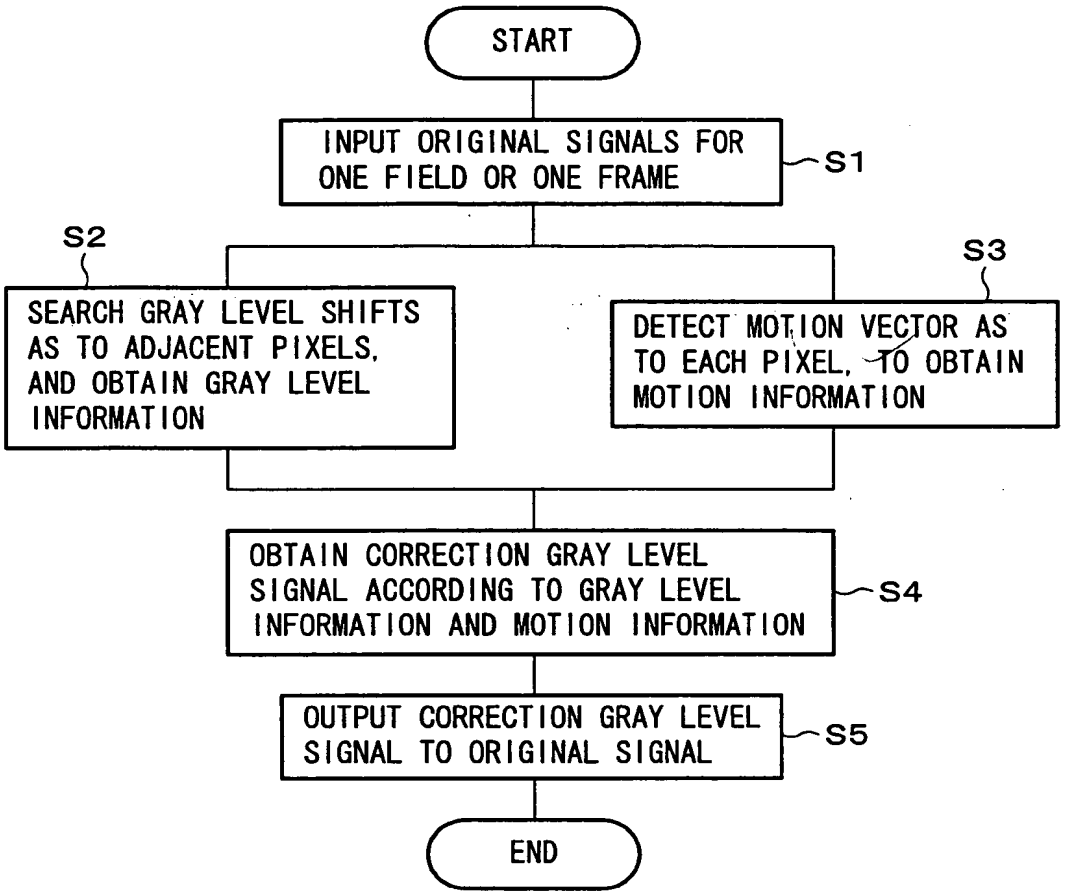


FIG. 2 (a)

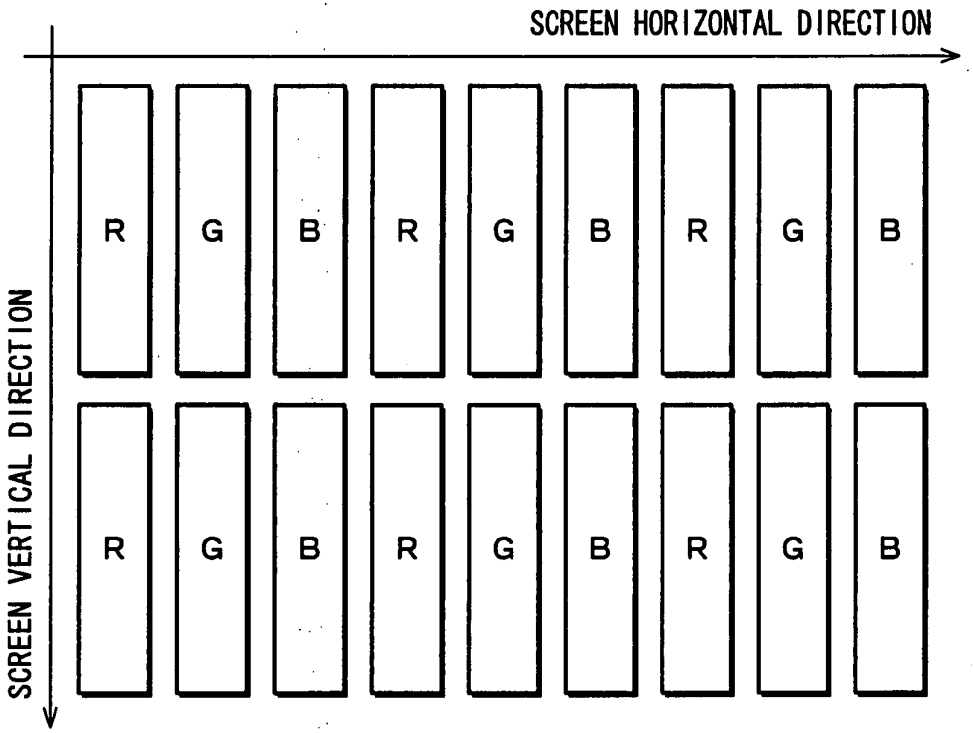

SCREEN HORIZONTAL DIRECTION
SCREEN VERTICAL DIRECTION
R
G
B
R
G
B
R
G
B
R
G
B
R
G
B
R
G
B
R
G
B
R
G
B

FIG. 2 (b)

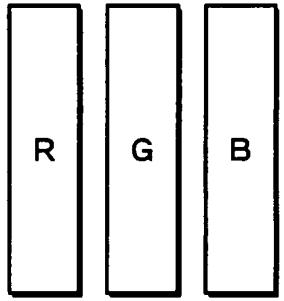

R
G
B

FIG. 3 (a)

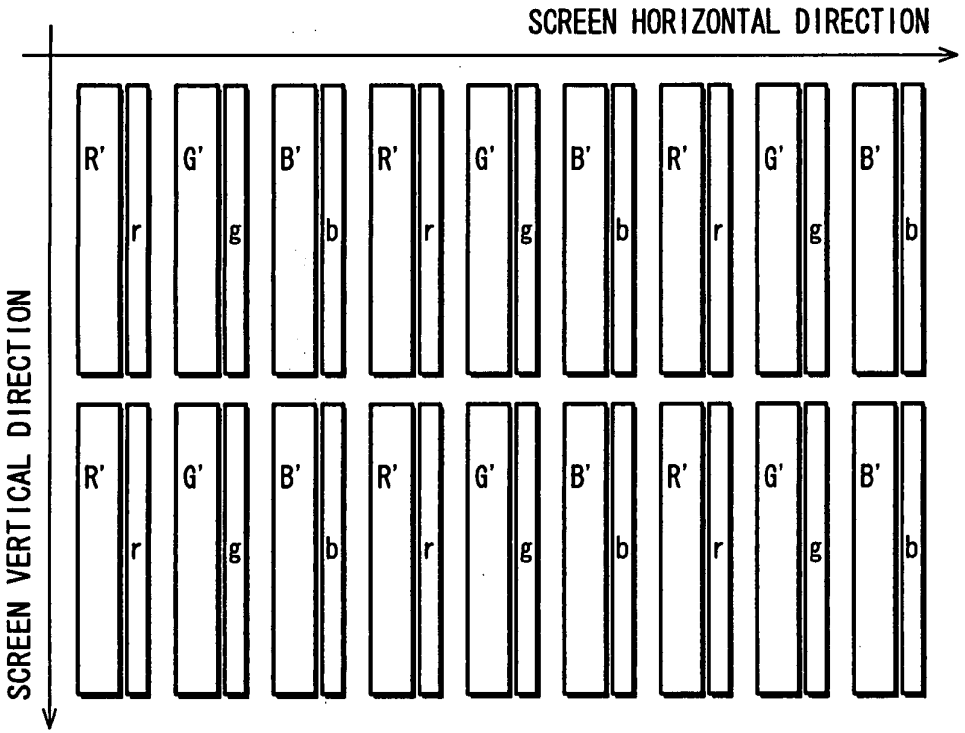

SCREEN HORIZONTAL DIRECTION
SCREEN VERTICAL DIRECTION
R'
r
G'
g
B'
b

FIG. 3 (b)

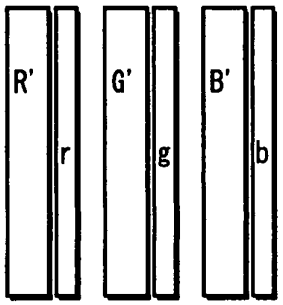

R'
r
G'
g
B'
b
1 PIXEL

FIG. 4

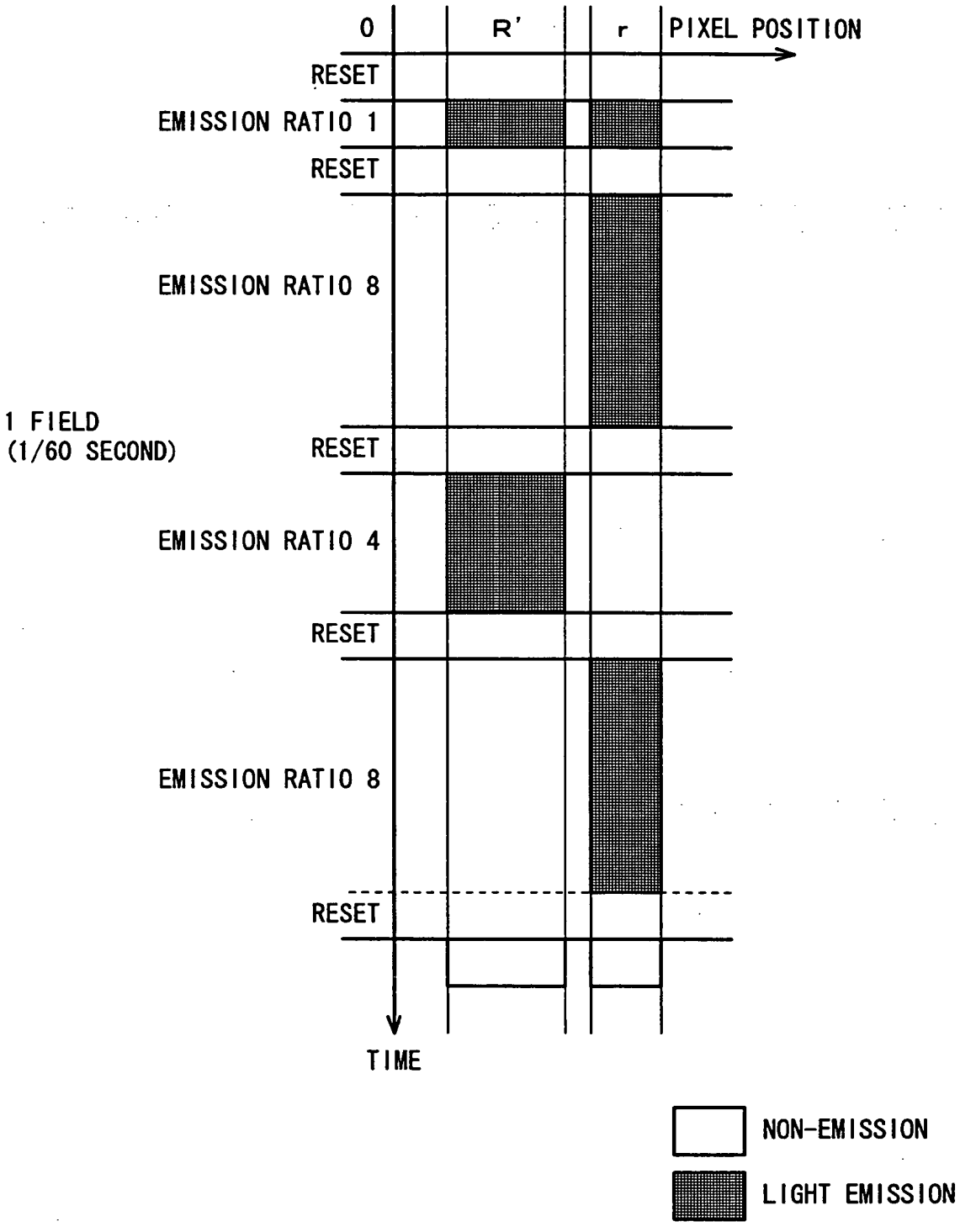

0
R'
r
PIXEL POSITION
RESET
EMISSION RATIO 1
RESET
EMISSION RATIO 8
1 FIELD
(1/60 SECOND)
RESET
EMISSION RATIO 4
RESET
EMISSION RATIO 8
RESET
TIME
NON-EMISSION
LIGHT EMISSION

FIG. 5

FIRST REDUNDANCY SIGNAL PATTERN 1

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	1		8		4		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	1	2	8	16	4	8	8	16
0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0
4	0	0	0	0	1	0	0	0
5	1	0	0	0	1	0	0	0
6	0	1	0	0	1	0	0	0
7	1	1	0	0	1	0	0	0
8	0	0	0	0	0	1	0	0
9	1	0	0	0	0	1	0	0
10	0	1	0	0	0	1	0	0
11	1	1	0	0	0	1	0	0
12	0	0	0	0	1	1	0	0
13	1	0	0	0	1	1	0	0
14	0	1	0	0	1	1	0	0
15	1	1	0	0	1	1	0	0
16	0	0	1	0	0	0	1	0
17	1	0	1	0	0	0	1	0
18	0	1	1	0	0	0	1	0
19	1	1	1	0	0	0	1	0
20	0	0	1	0	1	0	1	0
21	1	0	1	0	1	0	1	0
22	0	1	1	0	1	0	1	0
23	1	1	1	0	1	0	1	0
24	0	0	1	0	0	1	1	0
25	1	0	1	0	0	1	1	0
26	0	1	1	0	0	1	1	0
27	1	1	1	0	0	1	1	0
28	0	0	1	0	1	1	1	0
29	1	0	1	0	1	1	1	0
30	0	1	1	0	1	1	1	0
31	1	1	1	0	1	1	1	0

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	1		8		4		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	1	2	8	16	4	8	8	16
32	0	0	0	1	0	0	0	1
33	1	0	0	1	0	0	0	1
34	0	1	0	1	0	0	0	1
35	1	1	0	1	0	0	0	1
36	0	0	0	1	1	0	0	1
37	1	0	0	1	1	0	0	1
38	0	1	0	1	1	0	0	1
39	1	1	0	1	1	0	0	1
40	0	0	0	1	0	1	0	1
41	1	0	0	1	0	1	0	1
42	0	1	0	1	0	1	0	1
43	1	1	0	1	0	1	0	1
44	0	0	0	1	1	1	0	1
45	1	0	0	1	1	1	0	1
46	0	1	0	1	1	1	0	1
47	1	1	0	1	1	1	0	1
48	0	0	1	1	0	0	1	1
49	1	0	1	1	0	0	1	1
50	0	1	1	1	0	0	1	1
51	1	1	1	1	0	0	1	1
52	0	0	1	1	1	0	1	1
53	1	0	1	1	1	0	1	1
54	0	1	1	1	1	0	1	1
55	1	1	1	1	1	0	1	1
56	0	0	1	1	0	1	1	1
57	1	0	1	1	0	1	1	1
58	0	1	1	1	0	1	1	1
59	1	1	1	1	0	1	1	1
60	0	0	1	1	1	1	1	1
61	1	0	1	1	1	1	1	1
62	0	1	1	1	1	1	1	1
63	1	1	1	1	1	1	1	1

FIG. 6

FIRST REDUNDANCY SIGNAL PATTERN 2

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	1		8		4		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	1	2	8	16	4	8	8	16
0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0
4	0	0	0	0	1	0	0	0
5	1	0	0	0	1	0	0	0
6	0	1	0	0	1	0	0	0
7	1	1	0	0	1	0	0	0
8	0	0	1	0	0	0	0	0
9	1	0	1	0	0	0	0	0
10	0	1	1	0	0	0	0	0
11	1	1	1	0	0	0	0	0
12	0	0	1	0	1	0	0	0
13	1	0	1	0	1	0	0	0
14	0	1	1	0	1	0	0	0
15	1	1	1	0	1	0	0	0
16	0	0	1	0	0	1	0	0
17	1	0	1	0	0	1	0	0
18	0	1	1	0	0	1	0	0
19	1	1	1	0	0	1	0	0
20	0	0	1	0	1	1	0	0
21	1	0	1	0	1	1	0	0
22	0	1	1	0	1	1	0	0
23	1	1	1	0	1	1	0	0
24	0	0	0	1	0	0	1	0
25	1	0	0	1	0	0	1	0
26	0	1	0	1	0	0	1	0
27	1	1	0	1	0	0	1	0
28	0	0	0	1	1	0	1	0
29	1	0	0	1	1	0	1	0
30	0	1	0	1	1	0	1	0
31	1	1	0	1	1	0	1	0

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	1		8		4		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	1	2	8	16	4	8	8	16
32	0	0	0	1	0	1	1	0
33	1	0	0	1	0	1	1	0
34	0	1	0	1	0	1	1	0
35	1	1	0	1	0	1	1	0
36	0	0	0	1	1	1	1	0
37	1	0	0	1	1	1	1	0
38	0	1	0	1	1	1	1	0
39	1	1	0	1	1	1	1	0
40	0	0	1	1	0	0	0	1
41	1	0	1	1	0	0	0	1
42	0	1	1	1	0	0	0	1
43	1	1	1	1	0	0	0	1
44	0	0	1	1	1	0	0	1
45	1	0	1	1	1	0	0	1
46	0	1	1	1	1	0	0	1
47	1	1	1	1	1	0	0	1
48	0	0	1	1	0	1	0	1
49	1	0	1	1	0	1	0	1
50	0	1	1	1	0	1	0	1
51	1	1	1	1	0	1	0	1
52	0	0	1	1	1	1	0	1
53	1	0	1	1	1	1	0	1
54	0	1	1	1	1	1	0	1
55	1	1	1	1	1	1	0	1
56	0	0	1	1	0	1	1	1
57	1	0	1	1	0	1	1	1
58	0	1	1	1	0	1	1	1
59	1	1	1	1	0	1	1	1
60	0	0	1	1	1	1	1	1
61	1	0	1	1	1	1	1	1
62	0	1	1	1	1	1	1	1
63	1	1	1	1	1	1	1	1

FIG. 7

FIRST REDUNDANCY SIGNAL PATTERN 3

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	1		8		4		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	1	2	8	16	4	8	8	16
0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0
4	0	0	0	0	1	0	0	0
5	1	0	0	0	1	0	0	0
6	0	1	0	0	1	0	0	0
7	1	1	0	0	1	0	0	0
8	0	0	0	0	0	0	1	0
9	1	0	0	0	0	0	1	0
10	0	1	0	0	0	0	1	0
11	1	1	0	0	0	0	1	0
12	0	0	0	0	1	0	1	0
13	1	0	0	0	1	0	1	0
14	0	1	0	0	1	0	1	0
15	1	1	0	0	1	0	1	0
16	0	0	0	0	0	1	1	0
17	1	0	0	0	0	1	1	0
18	0	1	0	0	0	1	1	0
19	1	1	0	0	0	1	1	0
20	0	0	0	0	1	1	1	0
21	1	0	0	0	1	1	1	0
22	0	1	0	0	1	1	1	0
23	1	1	0	0	1	1	1	0
24	0	0	1	0	0	0	0	1
25	1	0	1	0	0	0	0	1
26	0	1	1	0	0	0	0	1
27	1	1	1	0	0	0	0	1
28	0	0	1	0	1	0	0	1
29	1	0	1	0	1	0	0	1
30	0	1	1	0	1	0	0	1
31	1	1	1	0	1	0	0	1

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	1		8		4		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	1	2	8	16	4	8	8	16
32	0	0	1	0	0	1	0	1
33	1	0	1	0	0	1	0	1
34	0	1	1	0	0	1	0	1
35	1	1	1	0	0	1	0	1
36	0	0	1	0	1	1	0	1
37	1	0	1	0	1	1	0	1
38	0	1	1	0	1	1	0	1
39	1	1	1	0	1	1	0	1
40	0	0	0	1	0	0	1	1
41	1	0	0	1	0	0	1	1
42	0	1	0	1	0	0	1	1
43	1	1	0	1	0	0	1	1
44	0	0	0	1	1	0	1	1
45	1	0	0	1	1	0	1	1
46	0	1	0	1	1	0	1	1
47	1	1	0	1	1	0	1	1
48	0	0	0	1	0	1	1	1
49	1	0	0	1	0	1	1	1
50	0	1	0	1	0	1	1	1
51	1	1	0	1	0	1	1	1
52	0	0	0	1	1	1	1	1
53	1	0	0	1	1	1	1	1
54	0	1	0	1	1	1	1	1
55	1	1	0	1	1	1	1	1
56	0	0	1	1	0	1	1	1
57	1	0	1	1	0	1	1	1
58	0	1	1	1	0	1	1	1
59	1	1	1	1	0	1	1	1
60	0	0	1	1	1	1	1	1
61	1	0	1	1	1	1	1	1
62	0	1	1	1	1	1	1	1
63	1	1	1	1	1	1	1	1

FIG. 8

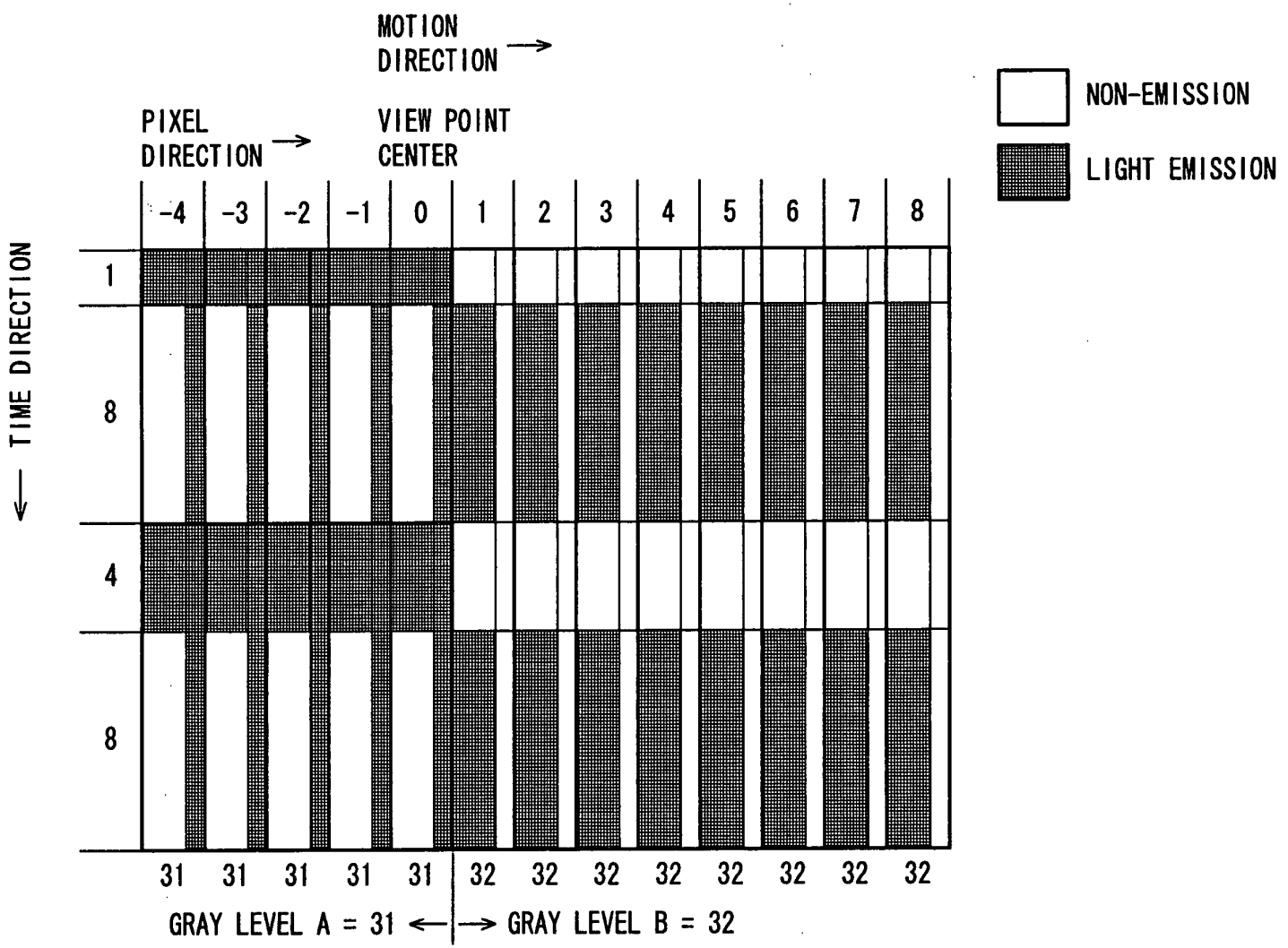

MOTION DIRECTION
PIXEL DIRECTION
VIEW POINT CENTER
NON-EMISSION
LIGHT EMISSION
TIME DIRECTION
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8
1
8
4
8
31 31 31 31 31 32 32 32 32 32 32 32 32
GRAY LEVEL A = 31
GRAY LEVEL B = 32

FIG. 9

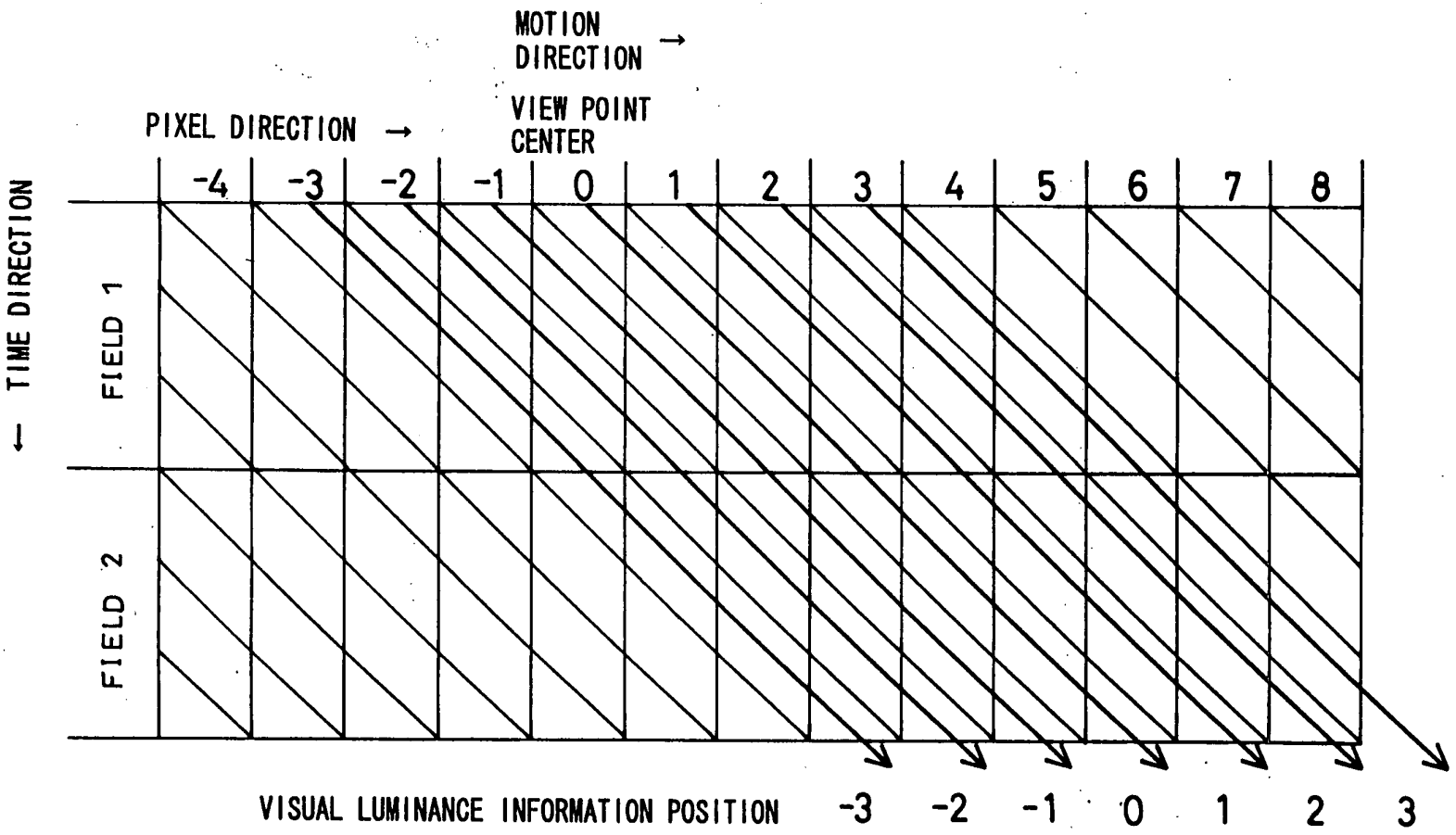

MOTION DIRECTION →
PIXEL DIRECTION →
VIEW POINT CENTER
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8
← TIME DIRECTION
FIELD 1
FIELD 2
VISUAL LUMINANCE INFORMATION POSITION
-3 -2 -1 0 1 2 3

FIG. 10

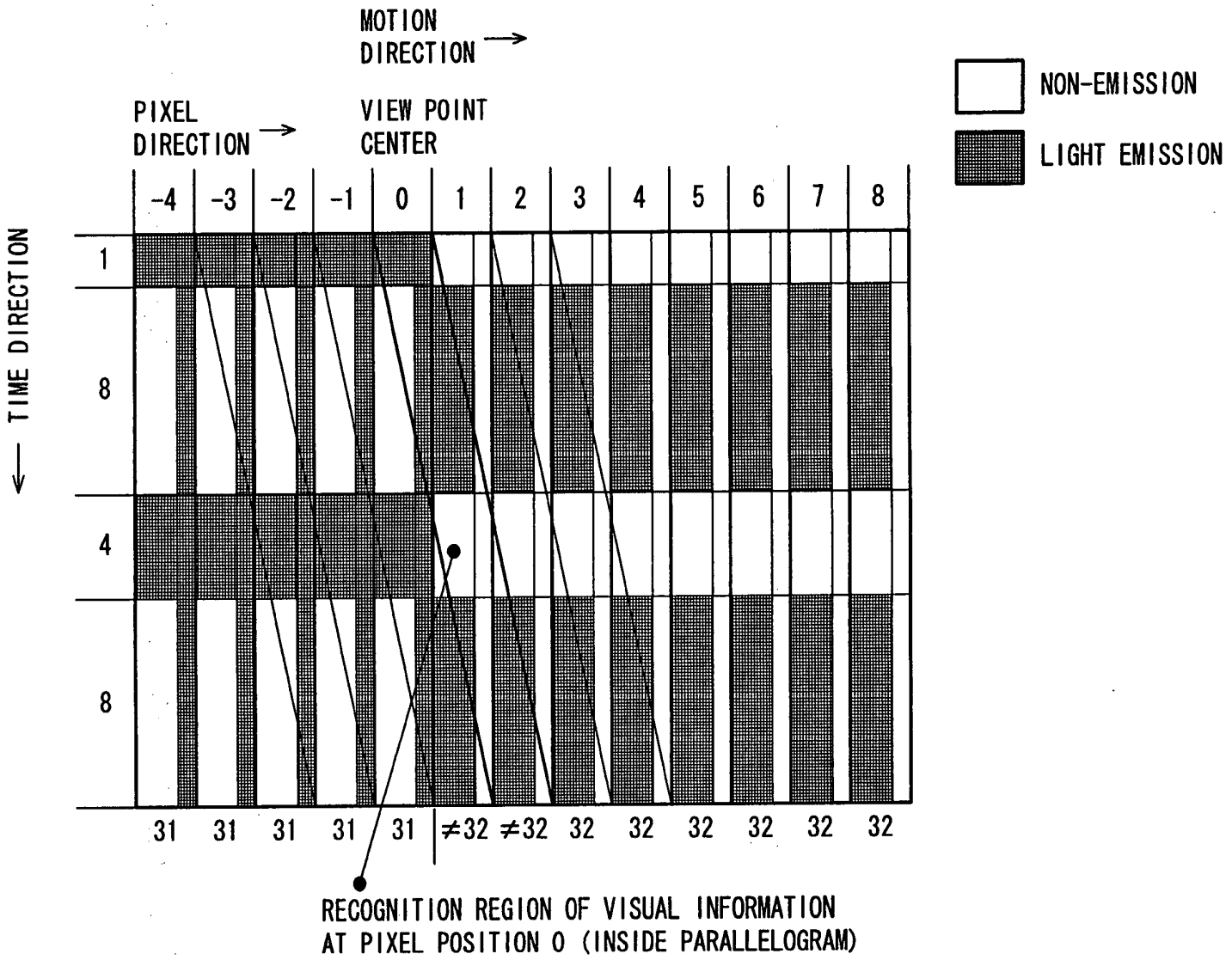

MOTION DIRECTION
PIXEL DIRECTION
VIEW POINT CENTER
NON-EMISSION
LIGHT EMISSION
TIME DIRECTION
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8
1
8
4
8
31 31 31 31 31 ≠32 ≠32 32 32 32 32 32 32
RECOGNITION REGION OF VISUAL INFORMATION
AT PIXEL POSITION 0 (INSIDE PARALLELOGRAM)

FIG. 11 (a)

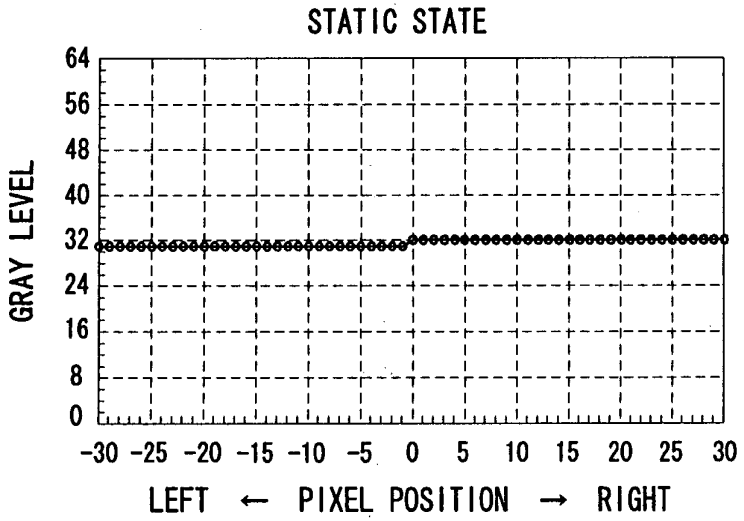


FIG. 11 (b)

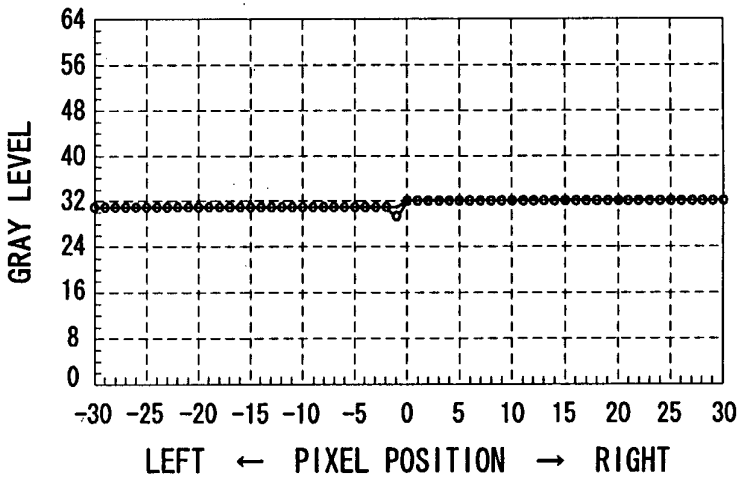


FIG. 11 (c)

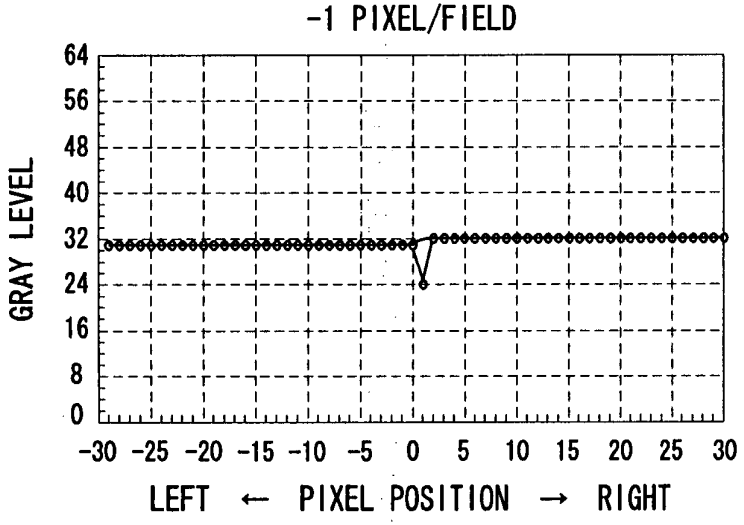


FIG. 12 (a)

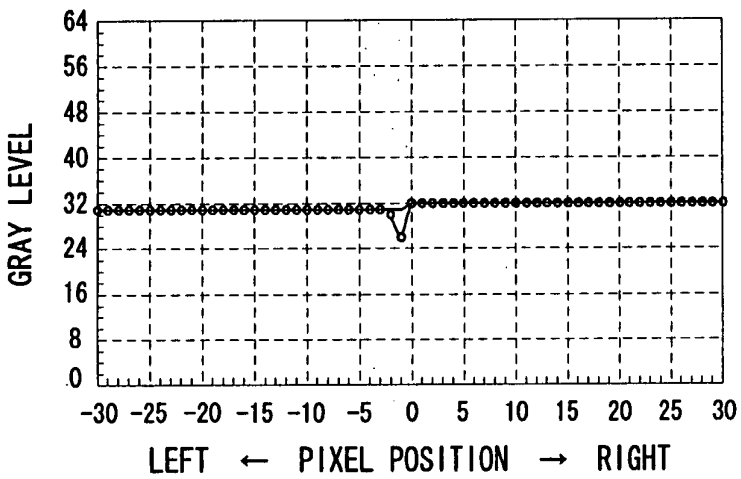


FIG. 12 (b)

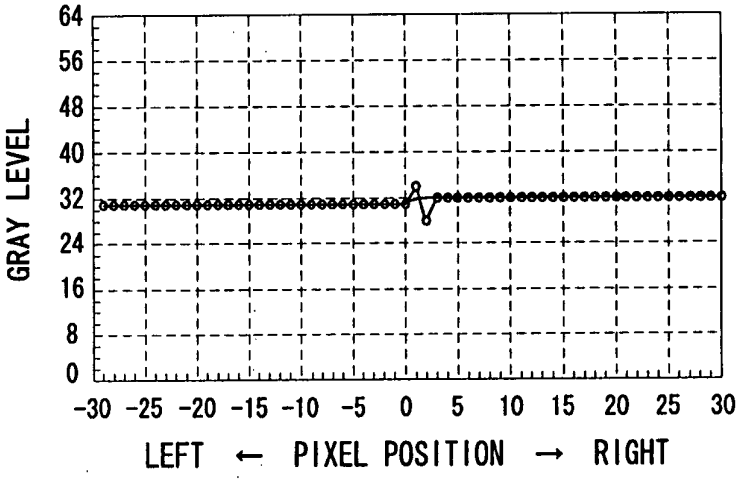


FIG. 12 (c)

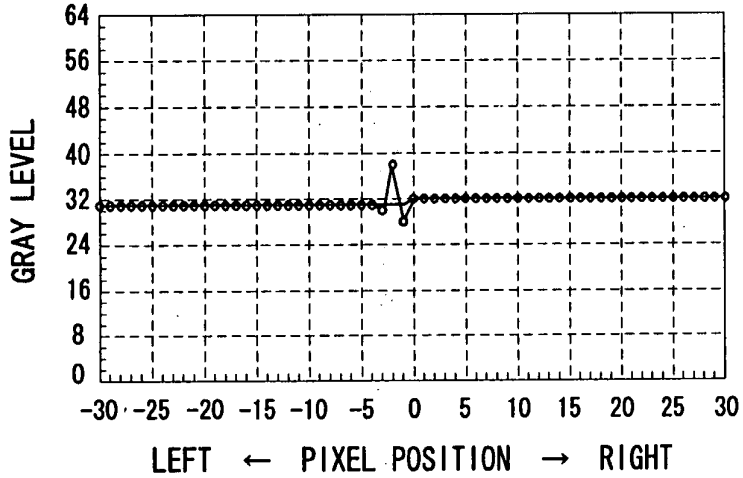


FIG. 12 (d)

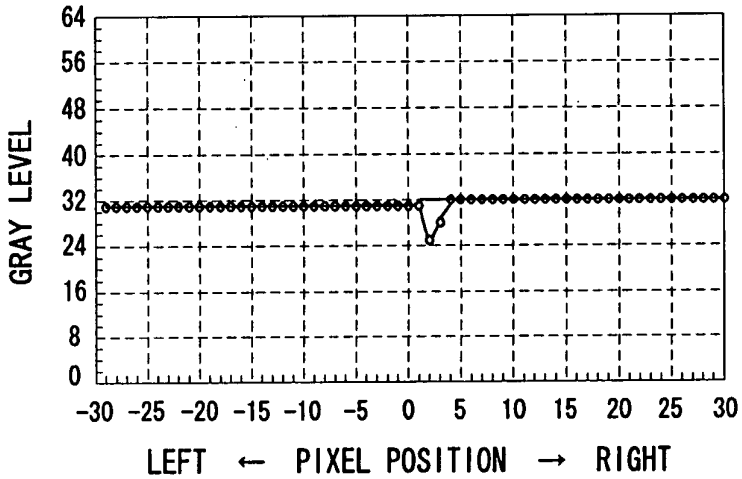


FIG. 13 (a) +5 PIXEL/FIELD

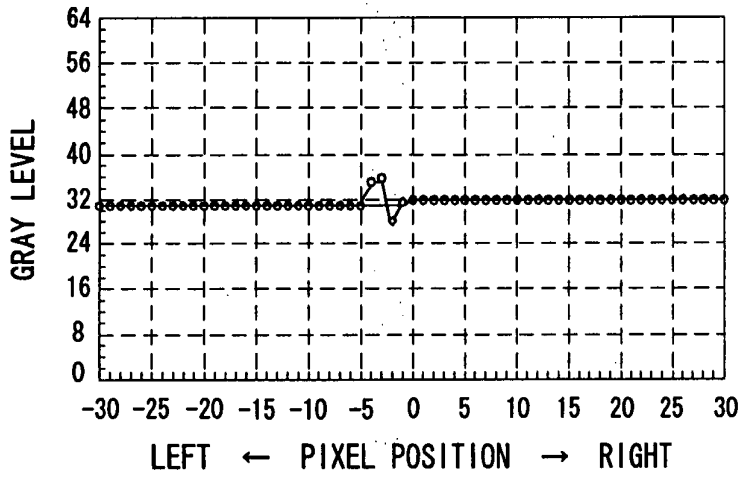


FIG. 13 (b) -5 PIXEL/FIELD

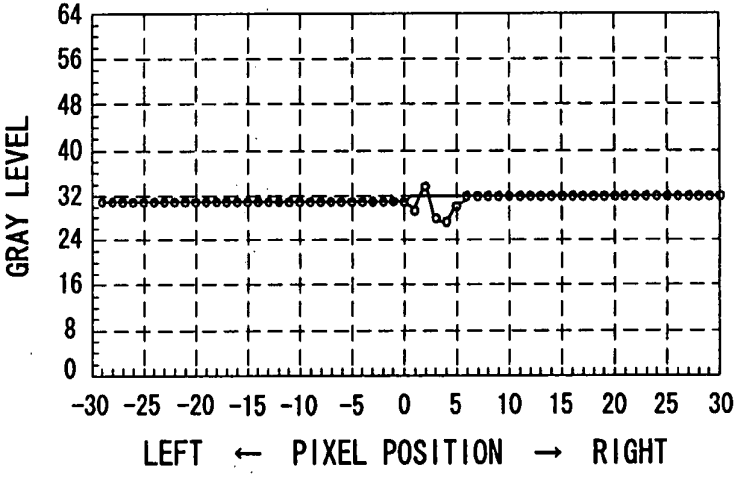


FIG. 13 (c) +10 PIXEL/FIELD

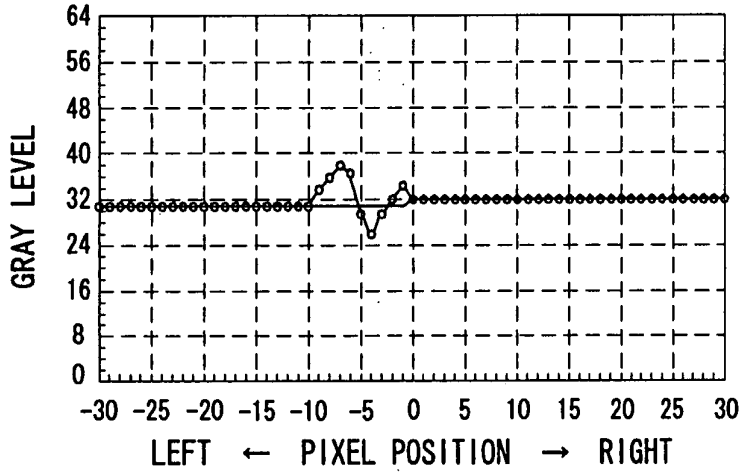
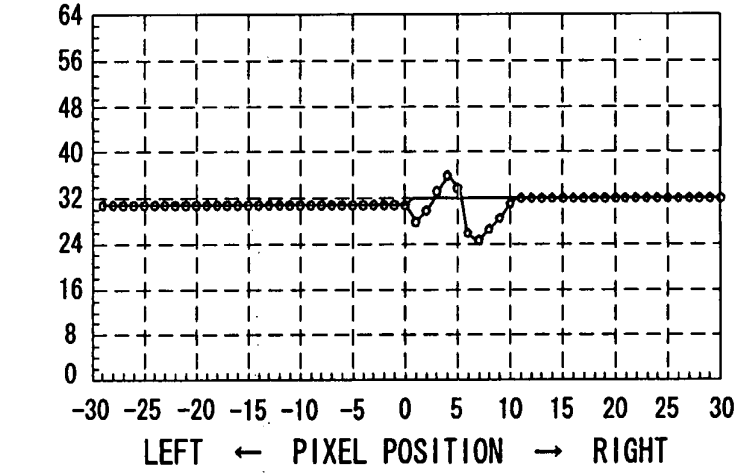


FIG. 13 (d) -10 PIXEL/FIELD



* In each drawing, O indicates a motion picture contour hindrance value, and - indicates an output gray level value of an original picture. The first redundancy signal pattern 1 is used.

FIG. 14 (a)

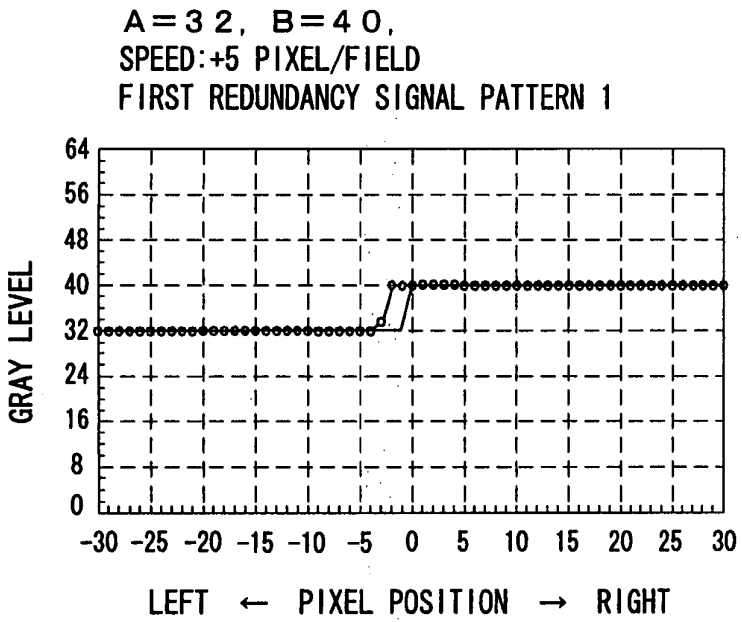


FIG. 14 (b)

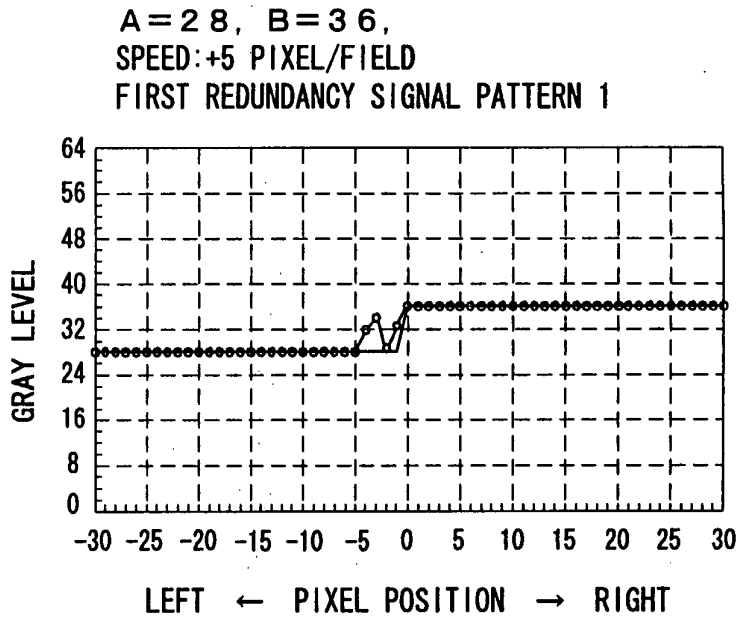


FIG. 15 (a)

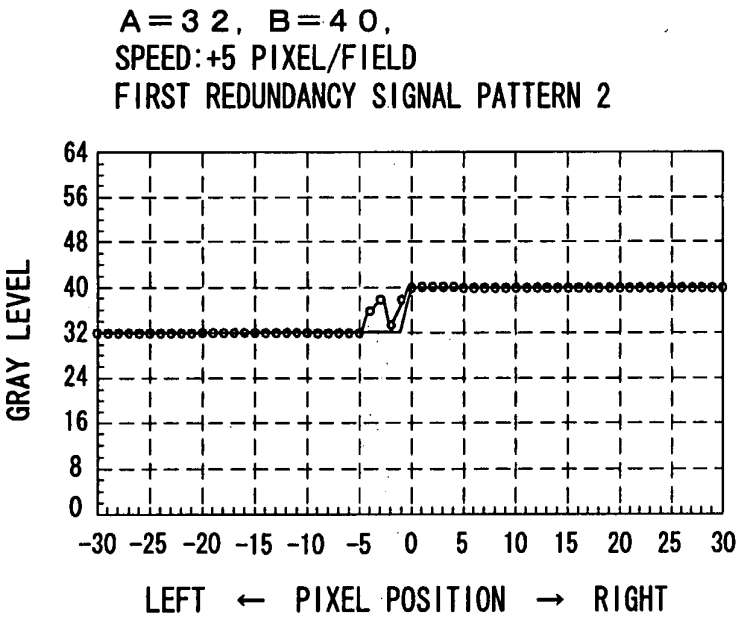


FIG. 15 (b)

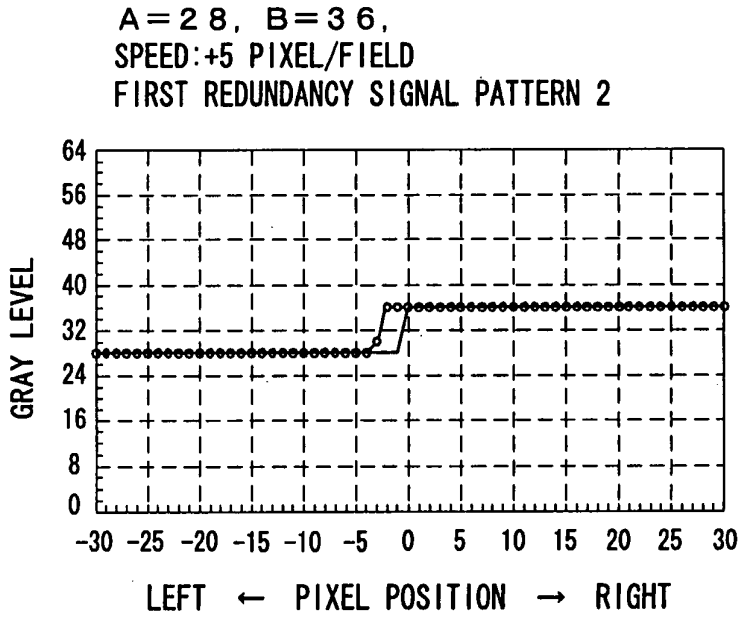


FIG. 16 (a)

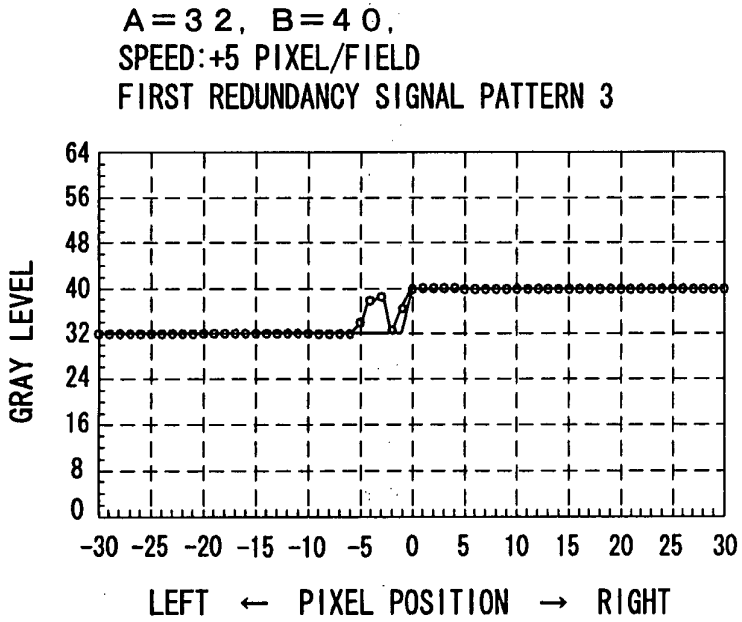


FIG. 16 (b)

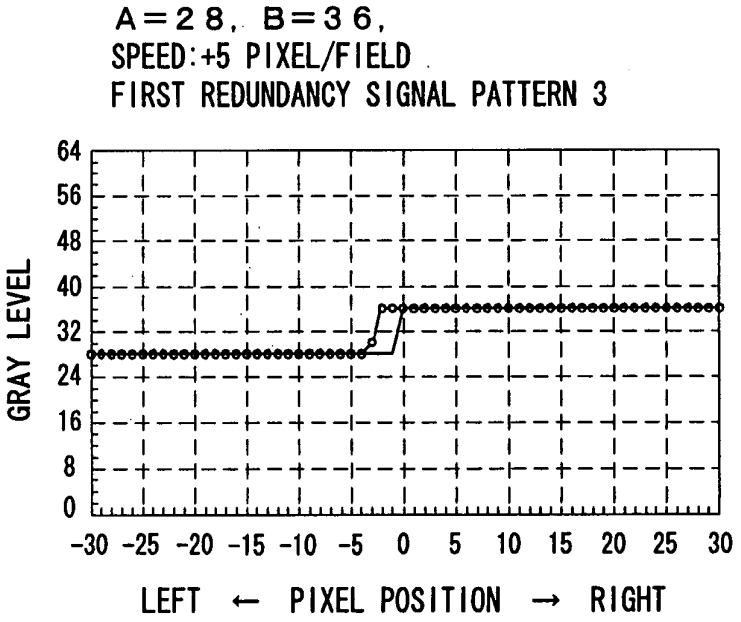


FIG. 17

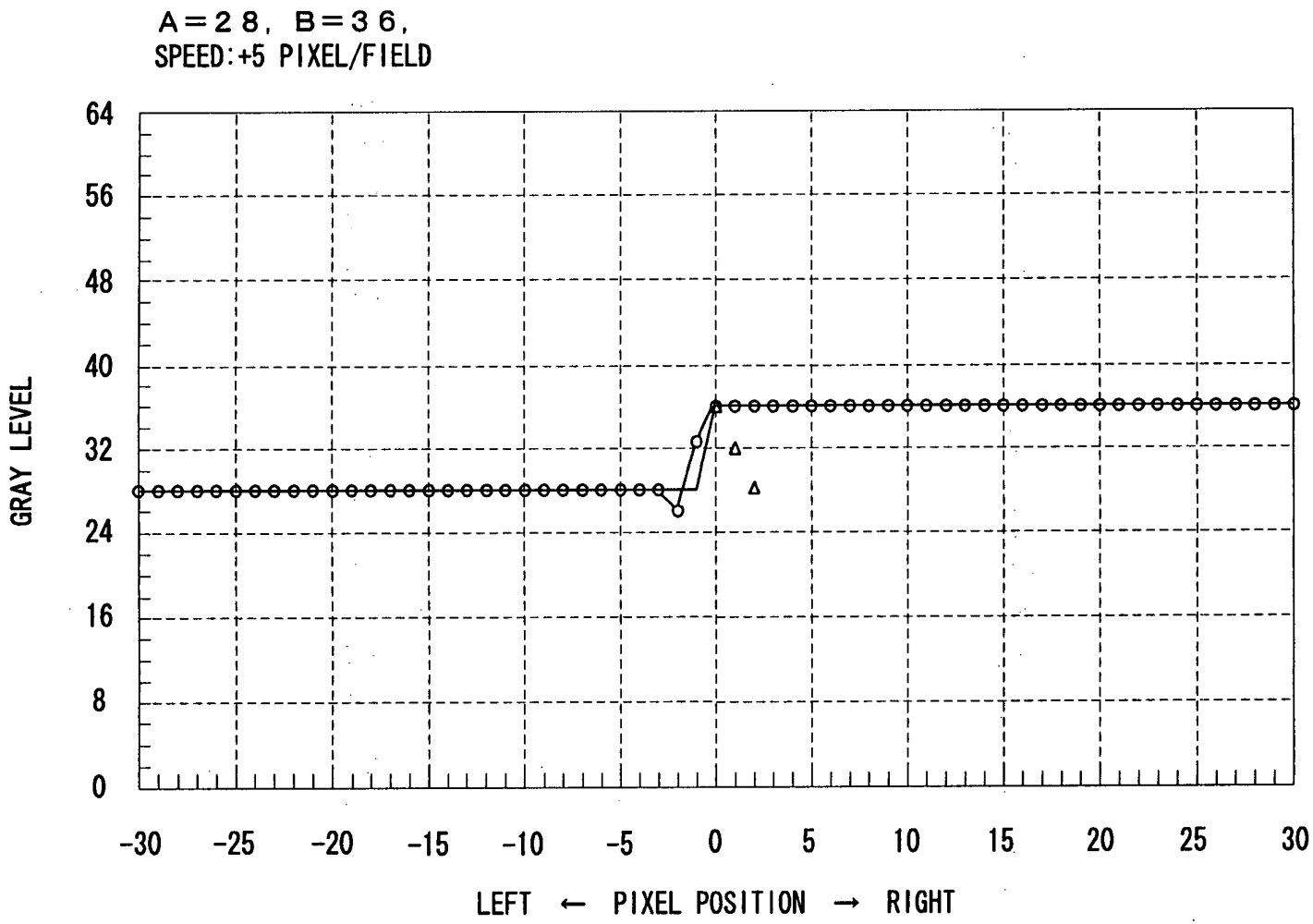

A=28, B=36,
SPEED:+5 PIXEL/FIELD
GRAY LEVEL
64
56
48
40
32
24
16
8
0
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
LEFT ← PIXEL POSITION → RIGHT
SOLID LINE : GRAY LEVEL VALUE OF PICTURE
○ : GRAY LEVEL VALUE OF PICTURE WHEN MOVING
△ : CORRECTION GRAY LEVEL VALUE

FIG. 18

OUTPUT CORRECTION GRAY LEVEL DEPENDENT ON POSITIVE MOTION SPEED IN HORIZONTAL DIRECTION WHEN A=35 AND B=40
NUMBER IN () INDICATES REDUNDANCY PATTERN NUMBER.

SPEED	PIXEL DISTANCE n FROM PIXEL A [PIXEL]							
[PIXEL/FIELD]	0	1	2	3	4	5	6	7
0	35(1)	40(1)	(CORRECTION IS UNNECESSARY FOR THIS SPEED)					
1	35(1)	32(1)						
2	35(1)	32(1)						
3	35(1)	32(1)	32(1)					
4	35(1)	32(1)	32(1)					
5	35(1)	32(1)	32(1)					
6	35(1)	32(1)	32(1)	32(1)				
7	35(1)	32(1)	32(1)	32(1)				
8	35(1)	32(1)	32(1)	32(1)	32(1)			
9	35(1)	32(1)	32(1)	32(1)	32(1)			
10	35(1)	32(1)	32(1)	32(1)	32(1)	32(1)		
11	35(1)	32(1)	32(1)	32(1)	32(1)	32(1)		
12	35(1)	32(1)	32(1)	32(1)	32(1)	32(1)	32(1)	
13	35(1)	32(1)	32(1)	32(1)	32(1)	32(1)	32(1)	
14	35(1)	32(1)	32(1)	32(1)	32(1)	32(1)	32(1)	32(1)
15	35(1)	32(1)	32(1)	32(1)	32(1)	32(1)	32(1)	32(1)

FIG. 19

OUTPUT CORRECTION GRAY LEVEL DEVIATION DEPENDENT ON POSITIVE MOTION SPEED IN HORIZONTAL DIRECTION WHEN A=35 AND B=40

SPEED	PIXEL DISTANCE n FROM PIXEL A [PIXEL]							
[PIXEL/FIELD]	0	1	2	3	4	5	6	7
0	0 (1)	0 (1)	(CORRECTION IS UNNECESSARY FOR THIS SPEED)					
1	0 (1)	− 8 (1)						
2	0 (1)	− 8 (1)						
3	0 (1)	− 8 (1)	− 8 (1)					
4	0 (1)	− 8 (1)	− 8 (1)					
5	0 (1)	− 8 (1)	− 8 (1)					
6	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)				
7	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)				
8	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)			
9	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)			
10	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)		
11	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)		
12	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	
13	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	
14	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)
15	0 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)	− 8 (1)

FIG. 20

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL

GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL ↓

A\B	0 1 2 3	4 5 6 7	8 9 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31
0 1 2 3	N	E (1)	E (1)	E (1)	F (2)	F (2)	F (2)	F (2)
4 5 6 7	E (1)	N	E (1)	E (1)	F (2)	F (2)	F (2)	F (2)
8 9 10 11	E (1)	E (1)	N	E (1)	F (2)	F (2)	F (2)	F (2)
12 13 14 15	E (1)	E (1)	E (1)	N	C (2)	C (2)	C (2)	C (2)
16 17 18 19	C (3)	C (3)	C (3)	C (3)	N	E (1)	E (1)	E (1)
20 21 22 23	F (3)	F (3)	F (3)	F (3)	E (1)	N	E (1)	E (1)
24 25 26 27	F (3)	F (3)	F (3)	F (3)	E (1)	E (1)	N	E (1)
28 29 30 31	F (3)	F (3)	F (3)	F (3)	E (1)	E (1)	E (1)	N

FIG.21

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL

↓ GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL

A \ B	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 53 54 55	56 57 58 59	60 61 62 63
0 1 2 3	F (2)	F (2)	F (2)	F (2)	F (2)	F (2)	F (2)	F (2)
4 5 6 7	F (2)	F (2)	F (2)	F (2)	F (2)	F (2)	F (2)	F (2)
8 9 10 11	F (2) **	F (2) **	F (2) **	F (2) **	F (2)	F (2)	F (2)	F (2)
12 13 14 15	F (2) *	F (2) *	F (2) *	F (2) *	F (2)	F (2)	F (2)	F (2)
16 17 18 19	f (2)	f (2)	f (2)	f (2)	F (2)	F (2)	F (2)	F (2)
20 21 22 23	f (2)	f (2)	f (2)	f (2)	F (2)	F (2)	F (2)	F (2)
24 25 26 27	f (2) *	f (2) *	f (2) *	f (2) *	F (2)	F (2)	F (2)	F (2)
28 29 30 31	D (2)	f (2) **	f (2) **	f (2) **	F (2)	F (2)	F (2)	F (2)

FIG. 22

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL

GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL ↓

A\B	0 1 2 3	4 5 6 7	8 9 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31
32 33 34 35	F (3)	F (3)	F (3)	F (3)	f (3) **	f (3) **	f (3) **	D (3)
36 37 38 39	F (3)	F (3)	F (3)	F (3)	f (3) *	f (3) *	f (3) *	f (3) *
40 41 42 43	F (3)	F (3)	F (3)	F (3)	f (3)	f (3)	f (3)	f (3)
44 45 46 47	F (3)	F (3)	F (3)	F (3)	f (3)	f (3)	f (3)	f (3)
48 49 50 51	F (3)	F (3)	F (3)	F (3)	F (3) *	F (3) *	F (3) *	F (3) *
52 53 54 55	F (3)	F (3)	F (3)	F (3)	F (3) **	F (3) **	F (3) **	F (3) **
56 57 58 59	F (3)	F (3)	F (3)	F (3)	F (3)	F (3)	F (3)	F (3)
60 61 62 63	F (3)	F (3)	F (3)	F (3)	F (3)	F (3)	F (3)	F (3)

FIG. 23

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL

↓ GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL

A \ B	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 53 54 55	56 57 58 59	60 61 62 63
32 33 34 35	N	E (1)	E (1)	E (1)	F (2)	F (2)	F (2)	F (2)
36 37 38 39	E (1)	N	E (1)	E (1)	F (2)	F (2)	F (2)	F (2)
40 41 42 43	E (1)	E (1)	N	E (1)	F (2)	F (2)	F (2)	F (2)
44 45 46 47	E (1)	E (1)	E (1)	N	C (2)	C (2)	C (2)	C (2)
48 49 50 51	C (3)	C (3)	C (3)	C (3)	N	E (1)	E (1)	E (1)
52 53 54 55	F (3)	F (3)	F (3)	F (3)	E (1)	N	E (1)	E (1)
56 57 58 59	F (3)	F (3)	F (3)	F (3)	E (1)	E (1)	N	E (1)
60 61 62 63	F (3)	F (3)	F (3)	F (3)	E (1)	E (1)	E (1)	N

FIG. 24

SYMBOL	FORMULAE
N	$G_n=B,\ n=1$
E(1)	$G_n=B-4TM,\ n=1\sim Nmax(V),\ Nmax(V)=V/2+\{V<4\}$
C(Jh)	$G_1=B-4T[M-2+\{AND(M=1, OR(V=4, V>=8))\}+2\{AND(M=1, V<=2)\}+\{AND(OR(M=2, M=4), V<=2\}]$ $G_2=G_1-4T[2-\{AND(M=1, OR(V=2, V=4, V>=8))\}+\{AND(M=1, V=3)\}-\{AND(M=2, V=2)\}-\{AND(M=3, V<=3\}]$ $G_n=G_{n-1}-4T,\ n=1\sim Nmax(V),\ Nmax(V)=1+\{AND(M<=3, V>=2)\}+\{AND(M=4, V>=3)\}+\{AND(M<=2, V>=4)\}+\{AND(M>=3, V>=5)\}$
D(Jh)	$G_1=B+4T[1-\{V=2\}+\{V=1\}],\ G_2=G_1-4T[2-\{V<=3\}]$ $G_n=G_{n-1}-4T,\ n=1\sim Nmax(V),\ Nmax(V)=1+\{V>=2\}+\{V>=3\}$
F(Jh)	$G_1=B-4T[J+\{AND(J=1, V<=3)\}+\{AND(J=2, V<=4)\}+\{AND(J>=3, V<=5)\}],\ G_n=G_{n-1}-4T,\ n=1\sim Nmax(V)$ $Nmax(V)=1+\{AND(J=0, V>=2)\}+\{AND(J=1, V>=3)\}+\{AND(J>=2, V>=4)\}+\{AND(J=0, V>=4)\}+\{AND(J=1, V>=5)\}+\{AND(J>=2, V>=6)\}]$
F(Jh)*	$G_1=B-4T[J+\{AND(J=0, V<=3)\}+\{AND(J=1, V<=4)\}+\{AND(J>=2, V<=5)\}],\ G_n=G_{n-1}-4T,\ n=1\sim Nmax(V)$ $Nmax(V)=1+2\{AND(J=0, V>=4)\}+2\{AND(J=1, V>=5)\}+2\{AND(J>=2, V>=6)\}$
F(Jh)**	$G_1=B-4T[J+\{AND(J=0, V<=3)\}+\{AND(J=1, V<=4)\}+\{AND(J>=2, V<=5)\}],\ G_n=G_{n-1}-4T,\ n=1\sim Nmax(V)$ $Nmax(V)=1+\{AND(J<=1, V>=3)\}+\{AND(J>=2, V>=4)\}+\{AND(J=0, V>=4)\}+\{AND(J=1, V>=5)\}+\{AND(J>=2, V>=6)\}]$
f(Jh)	$G_1=B-4TJ,\ G_n=G_{n-1}-4T,\ n=1\sim Nmax(V)$ $Nmax(V)=1+\{AND(J=0, V>=2)\}+\{AND(J=1, V>=3)\}+\{AND(J>=2, V>=4)\}+\{AND(J=0, V>=4)\}+\{AND(J=1, V>=5)\}+\{AND(J>=2, V>=6)\}]$
f(Jh)*	$G_1=B-4T[J-\{V=1\}],\ G_n=G_{n-1}-4T,\ n=1\sim Nmax(V)$ $Nmax(V)=1+\{AND(J=0, V>=2)\}+\{AND(J=1, V>=3)\}+\{AND(J>=2, V>=4)\}+\{AND(J=0, V>=4)\}+\{AND(J=1, V>=5)\}+\{AND(J>=2, V>=6)\}]$
f(Jh)**	$G_1=B-4T[J-1-\{V=1\}],\ G_n=G_{n-1}-4T,\ n=1\sim Nmax(V)$ $Nmax(V)=1+\{AND(J<=2, V>=2)\}+\{AND(J>=3, V>=4)\}+\{AND(J>=2, V>=4)\}+\{AND(J>=3, V>=6)\}$

A:GRAY LEVEL VALUE OF FOCUSED PIXEL
B:GRAY LEVEL VALUE OF PIXEL ADJACENT IN MOTION DIRECTION
V:ABSOLUTE VALUE OF MOTION SPEED [PIXEL/FIELD]
$M=|(B/4)-(A/4)|$:NUMBER OF SHIFT BLOCKS FOR EVERY UNIT OF 4 GRAY LEVELS
$K=|4(B/16)-(A/4)|$:INTERNAL-BLOCK-USE VARIABLE FOR EVERY UNIT OF 16 GRAY LEVELS
J=M-K:CALCULATION-USE INTERNAL VARIABLE

$T=(B-A)/|B-A|$:INCREASE/DECREASE OF CHANGE OF GRAY LEVEL VALUE IN MOTION DIRECTION (INCREASE:POSITIVE VALUE, DECREASE:NEGATIVE VALUE)
n:PIXEL DISTANCE FROM PIXEL A AS STARTING POINT (LET DISTANCE IN MOTION DIRECTION BE EXPRESSED WITH A POSITIVE VALUE)
Gn:GRAY LEVEL VALUE OF CORRECTION SIGNAL AT POSITION n
Nmax:MAXIMUM NUMBER OF CORRECTION SIGNALS
$Jh=1+\{T>0\}+2\{T<0\}$:REFERENTIAL NUMERAL OF REDUNDANCY SIGNAL PATTERN OF CORRECTION SIGNAL TO BE INSERTED

Results of logical operations described in {} indicate True=1 or False=0.
In a division calculation, an integer result is derived by dropping a fraction.

FIG. 25

SECOND REDUNDANCY SIGNAL PATTERN 1

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	8		4		1		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	8	16	4	8	1	2	8	16
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0
2	0	0	0	0	0	1	0	0
3	0	0	0	0	1	1	0	0
4	0	0	1	0	0	0	0	0
5	0	0	1	0	1	0	0	0
6	0	0	1	0	0	1	0	0
7	0	0	1	0	1	1	0	0
8	0	0	0	1	0	0	0	0
9	0	0	0	1	1	0	0	0
10	0	0	0	1	0	1	0	0
11	0	0	0	1	1	1	0	0
12	0	0	1	1	0	0	0	0
13	0	0	1	1	1	0	0	0
14	0	0	1	1	0	1	0	0
15	0	0	1	1	1	1	0	0
16	1	0	0	0	0	0	1	0
17	1	0	0	0	1	0	1	0
18	1	0	0	0	0	1	1	0
19	1	0	0	0	1	1	1	0
20	1	0	1	0	0	0	1	0
21	1	0	1	0	1	0	1	0
22	1	0	1	0	0	1	1	0
23	1	0	1	0	1	1	1	0
24	1	0	0	1	0	0	1	0
25	1	0	0	1	1	0	1	0
26	1	0	0	1	0	1	1	0
27	1	0	0	1	1	1	1	0
28	1	0	1	1	0	0	1	0
29	1	0	1	1	1	0	1	0
30	1	0	1	1	0	1	1	0
31	1	0	1	1	1	1	1	0

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	8		4		1		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	8	16	4	8	1	2	8	16
32	0	1	0	0	0	0	0	1
33	0	1	0	0	1	0	0	1
34	0	1	0	0	0	1	0	1
35	0	1	0	0	1	1	0	1
36	0	1	1	0	0	0	0	1
37	0	1	1	0	1	0	0	1
38	0	1	1	0	0	1	0	1
39	0	1	1	0	1	1	0	1
40	0	1	0	1	0	0	0	1
41	0	1	0	1	1	0	0	1
42	0	1	0	1	0	1	0	1
43	0	1	0	1	1	1	0	1
44	0	1	1	1	0	0	0	1
45	0	1	1	1	1	0	0	1
46	0	1	1	1	0	1	0	1
47	0	1	1	1	1	1	0	1
48	1	1	0	0	0	0	1	1
49	1	1	0	0	1	0	1	1
50	1	1	0	0	0	1	1	1
51	1	1	0	0	1	1	1	1
52	1	1	1	0	0	0	1	1
53	1	1	1	0	1	0	1	1
54	1	1	1	0	0	1	1	1
55	1	1	1	0	1	1	1	1
56	1	1	0	1	0	0	1	1
57	1	1	0	1	1	0	1	1
58	1	1	0	1	0	1	1	1
59	1	1	0	1	1	1	1	1
60	1	1	1	1	0	0	1	1
61	1	1	1	1	1	0	1	1
62	1	1	1	1	0	1	1	1
63	1	1	1	1	1	1	1	1

FIG. 26

SECOND REDUNDANCY SIGNAL PATTERN 2

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	8		4		1		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	8	16	4	8	1	2	8	16
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0
2	0	0	0	0	0	1	0	0
3	0	0	0	0	1	1	0	0
4	0	0	1	0	0	0	0	0
5	0	0	1	0	1	0	0	0
6	0	0	1	0	0	1	0	0
7	0	0	1	0	1	1	0	0
8	1	0	0	0	0	0	0	0
9	1	0	0	0	1	0	0	0
10	1	0	0	0	0	1	0	0
11	1	0	0	0	1	1	0	0
12	1	0	1	0	0	0	0	0
13	1	0	1	0	1	0	0	0
14	1	0	1	0	0	1	0	0
15	1	0	1	0	1	1	0	0
16	1	0	0	1	0	0	0	0
17	1	0	0	1	1	0	0	0
18	1	0	0	1	0	1	0	0
19	1	0	0	1	1	1	0	0
20	1	0	1	1	0	0	0	0
21	1	0	1	1	1	0	0	0
22	1	0	1	1	0	1	0	0
23	1	0	1	1	1	1	0	0
24	0	1	0	0	0	0	1	0
25	0	1	0	0	1	0	1	0
26	0	1	0	0	0	1	1	0
27	0	1	0	0	1	1	1	0
28	0	1	1	0	0	0	1	0
29	0	1	1	0	1	0	1	0
30	0	1	1	0	0	1	1	0
31	0	1	1	0	1	1	1	0

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	8		4		1		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	8	16	4	8	1	2	8	16
32	0	1	0	1	0	0	1	0
33	0	1	0	1	1	0	1	0
34	0	1	0	1	0	1	1	0
35	0	1	0	1	1	1	1	0
36	0	1	1	1	0	0	1	0
37	0	1	1	1	1	0	1	0
38	0	1	1	1	0	1	1	0
39	0	1	1	1	1	1	1	0
40	1	1	0	0	0	0	0	1
41	1	1	0	0	1	0	0	1
42	1	1	0	0	0	1	0	1
43	1	1	0	0	1	1	0	1
44	1	1	1	0	0	0	0	1
45	1	1	1	0	1	0	0	1
46	1	1	1	0	0	1	0	1
47	1	1	1	0	1	1	0	1
48	1	1	0	1	0	0	0	1
49	1	1	0	1	1	0	0	1
50	1	1	0	1	0	1	0	1
51	1	1	0	1	1	1	0	1
52	1	1	1	1	0	0	0	1
53	1	1	1	1	1	0	0	1
54	1	1	1	1	0	1	0	1
55	1	1	1	1	1	1	0	1
56	1	1	0	1	0	0	1	1
57	1	1	0	1	1	0	1	1
58	1	1	0	1	0	1	1	1
59	1	1	0	1	1	1	1	1
60	1	1	1	1	0	0	1	1
61	1	1	1	1	1	0	1	1
62	1	1	1	1	0	1	1	1
63	1	1	1	1	1	1	1	1

FIG. 27

SECOND REDUNDANCY SIGNAL PATTERN 3

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	8		4		1		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	8	16	4	8	1	2	8	16
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0
2	0	0	0	0	0	1	0	0
3	0	0	0	0	1	1	0	0
4	0	0	1	0	0	0	0	0
5	0	0	1	0	1	0	0	0
6	0	0	1	0	0	1	0	0
7	0	0	1	0	1	1	0	0
8	0	0	0	0	0	0	1	0
9	0	0	0	0	1	0	1	0
10	0	0	0	0	0	1	1	0
11	0	0	0	0	1	1	1	0
12	0	0	1	0	0	0	1	0
13	0	0	1	0	1	0	1	0
14	0	0	1	0	0	1	1	0
15	0	0	1	0	1	1	1	0
16	0	0	0	1	0	0	1	0
17	0	0	0	1	1	0	1	0
18	0	0	0	1	0	1	1	0
19	0	0	0	1	1	1	1	0
20	0	0	1	1	0	0	1	0
21	0	0	1	1	1	0	1	0
22	0	0	1	1	0	1	1	0
23	0	0	1	1	1	1	1	0
24	1	0	0	0	0	0	0	1
25	1	0	0	0	1	0	0	1
26	1	0	0	0	0	1	0	1
27	1	0	0	0	1	1	0	1
28	1	0	1	0	0	0	0	1
29	1	0	1	0	1	0	0	1
30	1	0	1	0	0	1	0	1
31	1	0	1	0	1	1	0	1

SUB-FIELD	SF1		SF2		SF3		SF4	
TIME DIVISION RATIO	8		4		1		8	
PIXEL DIVISION RATIO	1	2	1	2	1	2	1	2
GRAY LEVEL/ WEIGHT TOTAL	8	16	4	8	1	2	8	16
32	1	0	0	1	0	0	0	1
33	1	0	0	1	1	0	0	1
34	1	0	0	1	0	1	0	1
35	1	0	0	1	1	1	0	1
36	1	0	1	1	0	0	0	1
37	1	0	1	1	1	0	0	1
38	1	0	1	1	0	1	0	1
39	1	0	1	1	1	1	0	1
40	0	1	0	0	0	0	1	1
41	0	1	0	0	1	0	1	1
42	0	1	0	0	0	1	1	1
43	0	1	0	0	1	1	1	1
44	0	1	1	0	0	0	1	1
45	0	1	1	0	1	0	1	1
46	0	1	1	0	0	1	1	1
47	0	1	1	0	1	1	1	1
48	0	1	0	1	0	0	1	1
49	0	1	0	1	1	0	1	1
50	0	1	0	1	0	1	1	1
51	0	1	0	1	1	1	1	1
52	0	1	1	1	0	0	1	1
53	0	1	1	1	1	0	1	1
54	0	1	1	1	0	1	1	1
55	0	1	1	1	1	1	1	1
56	1	1	0	1	0	0	1	1
57	1	1	0	1	1	0	1	1
58	1	1	0	1	0	1	1	1
59	1	1	0	1	1	1	1	1
60	1	1	1	1	0	0	1	1
61	1	1	1	1	1	0	1	1
62	1	1	1	1	0	1	1	1
63	1	1	1	1	1	1	1	1

FIG. 28

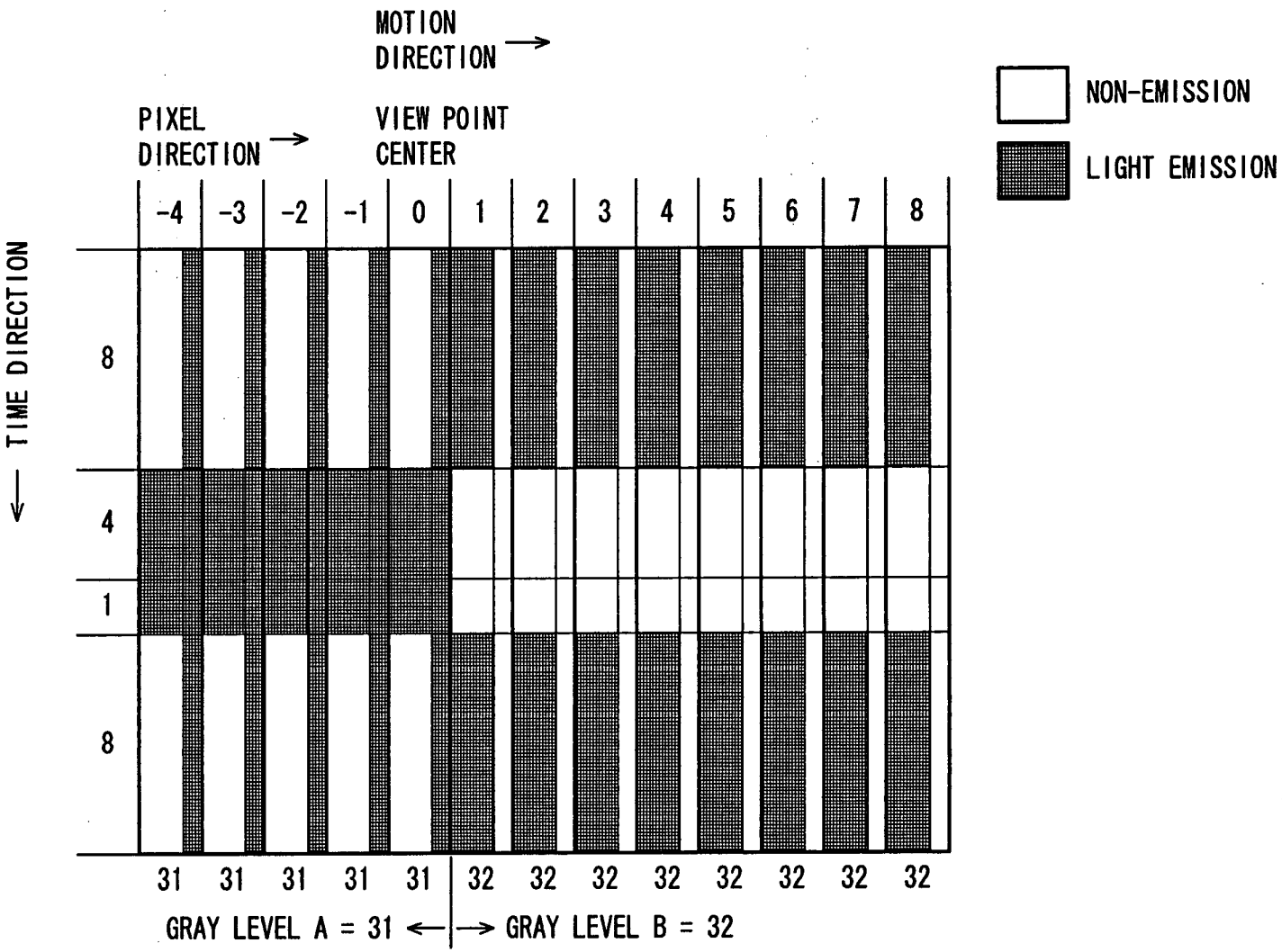

MOTION DIRECTION
PIXEL DIRECTION
VIEW POINT CENTER
NON-EMISSION
LIGHT EMISSION
TIME DIRECTION
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8
8
4
1
8
31 31 31 31 31 32 32 32 32 32 32 32 32
GRAY LEVEL A = 31
GRAY LEVEL B = 32

FIG. 29

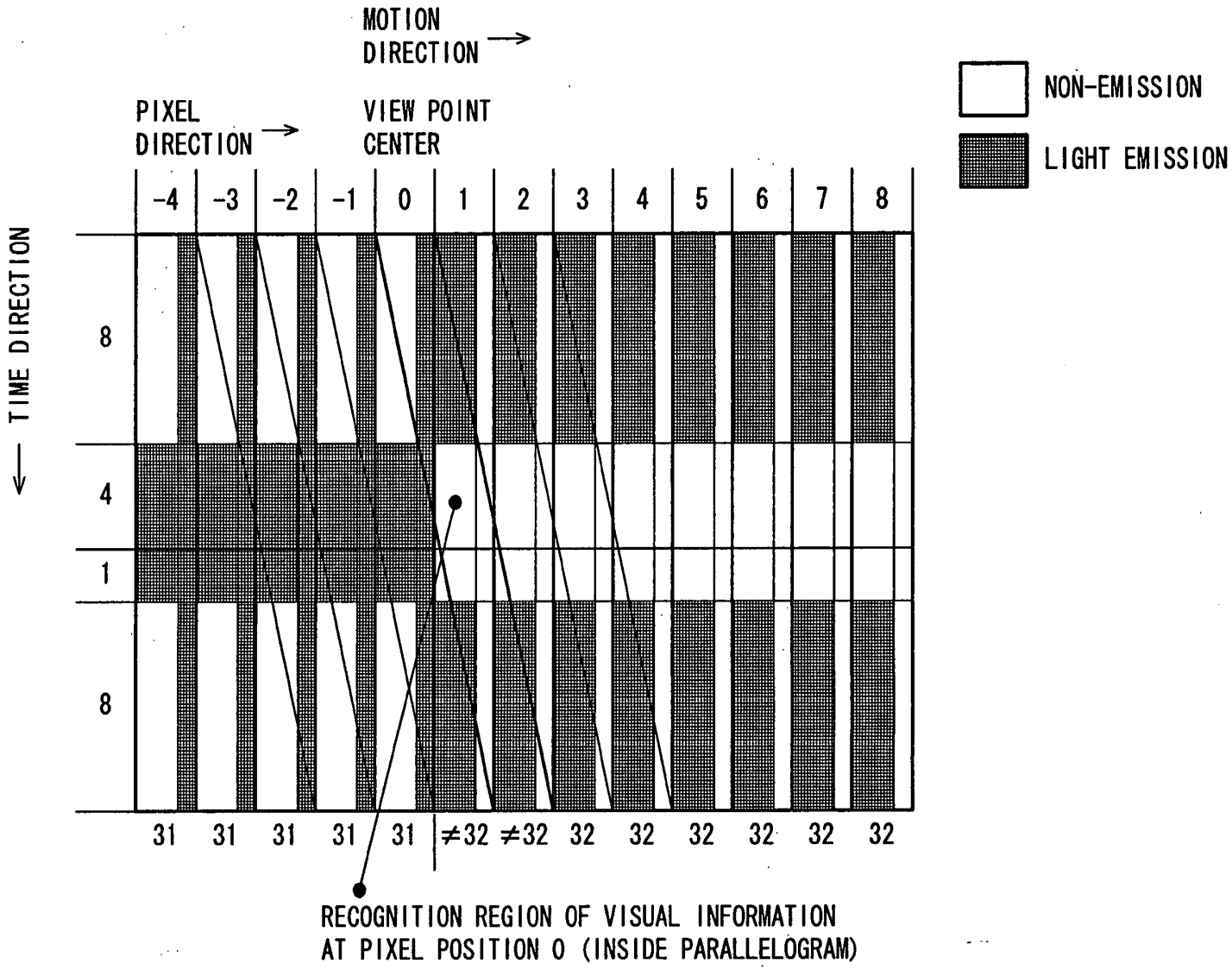

MOTION DIRECTION
PIXEL DIRECTION
VIEW POINT CENTER
NON-EMISSION
LIGHT EMISSION
TIME DIRECTION
-4 -3 -2 -1 0 1 2 3 4 5 6 7 8
8
4
1
8
31 31 31 31 31 ≠32 ≠32 32 32 32 32 32 32
RECOGNITION REGION OF VISUAL INFORMATION
AT PIXEL POSITION 0 (INSIDE PARALLELOGRAM)

FIG. 30

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL

↓ GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL

A\B	0 1 2 3	4 5 6 7	8 9 10 11	12 13 14 15	16 17 18 19	20 21 22 23	24 25 26 27	28 29 30 31
0	N	N	N	N	N	N	N	N
1								
2		C1 N C1 C1	C1 N C1 C1	N N C1 N	D1 N D1 D1	C1 N C1 C1	C1 N C1 C1	N N C1 N
3		N	N	N	N	N	N	N
4	N	N	N N C1 N	N	E 2	N N E2 N	N	N
5	C1 C1 N C1		N	N		N	N	N
6	N	C 1	N N C1 N	C1 N C1 C1		E 2	C1 N C1 C1	C1 N C1 C1
7	N			N		N N E2 N	N	N
8	N	N C1 N N	N	N	E 2	E 2	N N E2 N	N	N
9	C1 C1 N C1	C 1		N			N	N	N
10	N	N C1 N N		C1 N C1 C1			E 2	C1 N C1 C1
11	N	N		N			N N E2 N	N
12	N	N	N	N	F 2	E 2	E 2	N	N
13	N C1 N N	C1 C1 N C1	C1 C1 N C1						
14	N	N	N					D1 N D1 D1	N
15		N	N						
16	N	E 3	E 3	F 3	N	N	N	N	N
17	D1 D1 N D1								
18	N					C1 N C1 C1	C1 N C1 C1	N N C1 N	N
19	N					N	N		
20	N	N E3 N N	E 3	E 3	N	N	N N C1 N	N	N
21	C1 C1 N C1	E 3			C1 C1 N C1				
22	N	N E3 N N	E 3		N	N	C 1	N N C1 N	C1 N C1 C1
23	N	N			N				N
24	N	N	N E3 N N	E 3	N	N C1 N N	C 1	N	N
25	C1 C1 N C1	C1 C1 N C1	E 3	E 3	C1 C1 N C1	C 1	N		
26	N	N	N E3 N N		N	N	N C1 N N	C1 N C1 C1	N
27	N	N	N		N	N	N		
28	N	N C1 N N	N	D1 D1 N D1	N	N C1 N N	C1 C1 N C1	N	N
29	C1 C1 N C1	C1 C1 N C1	C1 C1 N C1		N	C1 C1 N C1	N	C1 C1 N C1	
30	N	N	N	N	N	N	N	N	N
31		N	N		N	N	N		

FIG. 31

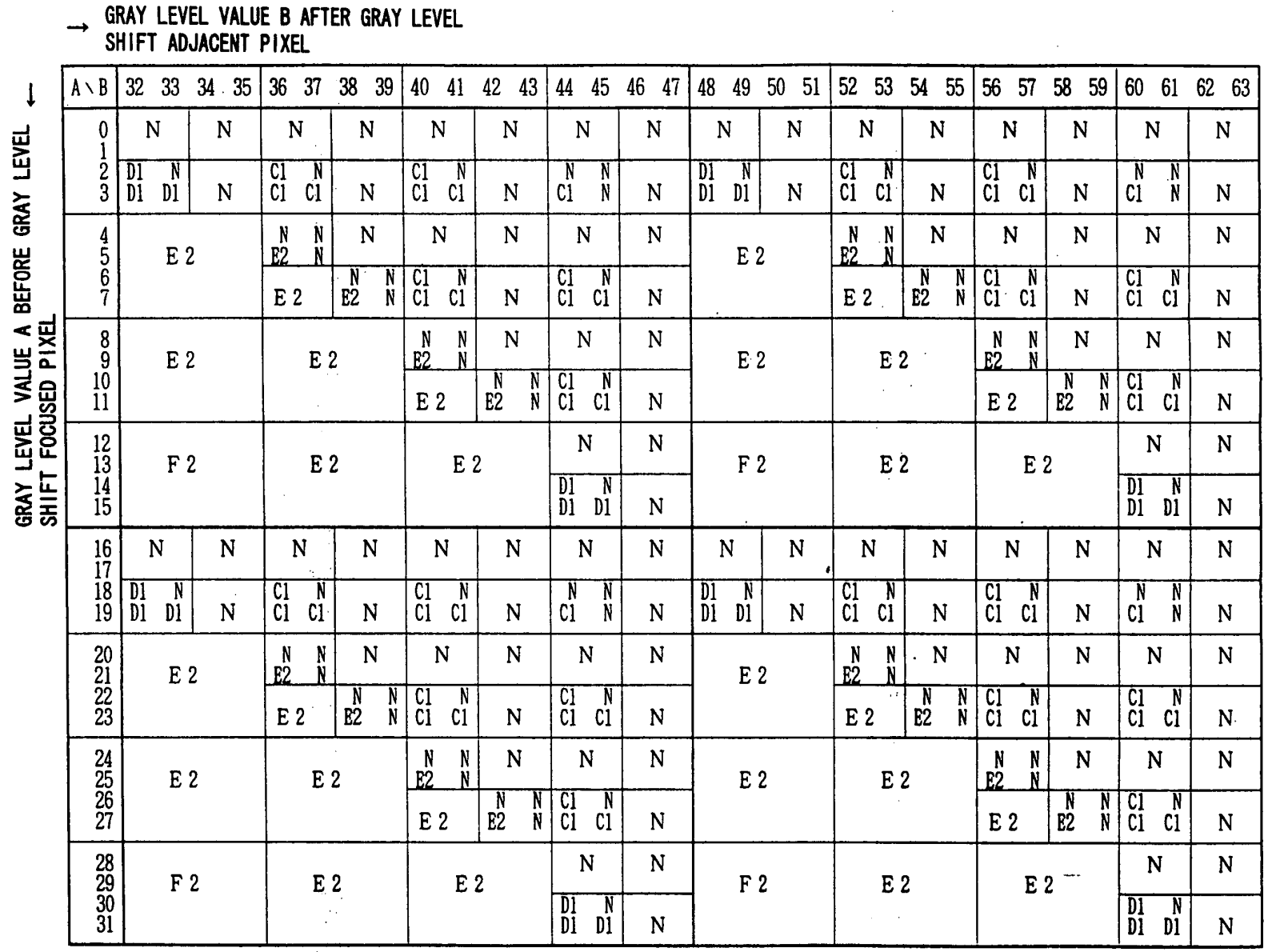

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL
↓ GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL
A\B
32 33 34 35
36 37 38 39
40 41 42 43
44 45 46 47
48 49 50 51
52 53 54 55
56 57 58 59
60 61 62 63
0 1
2 3
4 5
6 7
8 9
10 11
12 13
14 15
16 17
18 19
20 21
22 23
24 25
26 27
28 29
30 31
N
D1 N
D1 D1
C1 N
C1 C1
N N
E2 N
E 2
F 2

FIG. 32

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL

↓ GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL

A\B	0 1	2 3	4 5	6 7	8 9	10 11	12 13	14 15	16 17	18 19	20 21	22 23	24 25	26 27	28 29	30 31
32 33	N	D1 D1 / N D1	E 3		E 3		F 3		N	D1 D1 / N D1	E 3		E 3		F 3	
34 35	N	N							N	N						
36 37	N	C1 C1 / N C1	N E3 / N N	E 3	E 3		E 3		N	C1 C1 / N C1	N E3 / N N	E 3	E 3		E 3	
38 39	N	N	N	N E3 / N N					N	N	N	N E3 / N N				
40 41	N	C1 C1 / N C1	N	C1 C1 / N C1	N E3 / N N	E 3	E 3		N	C1 C1 / N C1	N	C1 C1 / N C1	N E3 / N N	E 3	E 3	
42 43	N	N	N	N	N	N E3 / N N			N	N	N	N	N	N E3 / N N		
44 45	N	N C1 / N N	N	C1 C1 / N C1	N	C1 C1 / N C1	N	D1 D1 / N D1	N	N C1 / N N	N	C1 C1 / N C1	N	C1 C1 / N C1	N	D1 D1 / N D1
46 47	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
48 49	N	D1 D1 / N D1	E 3		E 3		F 3		N	D1 D1 / N D1	E 3		E 3		F 3	
50 51	N	N							N	N						
52 53	N	C1 C1 / N C1	N E3 / N N	E 3	E 3		E 3		N	C1 C1 / N C1	N E3 / N N	E 3	E 3		E 3	
54 55	N	N	N	N E3 / N N					N	N	N	N E3 / N N				
56 57	N	C1 C1 / N C1	N	C1 C1 / N C1	N E3 / N N	E 3	E 3		N	C1 C1 / N C1	N	C1 C1 / N C1	N E3 / N N	E 3	E 3	
58 59	N	N	N	N	N	N E3 / N N			N	N	N	N	N	N E3 / N N		
60 61	N	N C1 / N N	N	C1 C1 / N C1	N	C1 C1 / N C1	N	D1 D1 / N D1	N	N C1 / N N	N	C1 C1 / N C1	N	C1 C1 / N C1	N	D1 D1 / N D1
62 63	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

FIG, 33

→ GRAY LEVEL VALUE B AFTER GRAY LEVEL SHIFT ADJACENT PIXEL

↓ GRAY LEVEL VALUE A BEFORE GRAY LEVEL SHIFT FOCUSED PIXEL

A \ B	32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47	48 49 50 51	52 53 54 55	56 57 58 59	60 61 62 63
32 33 34 35	N	N / C1 N / C1 C1 / N	N / C1 C1 / N	N / C1 N / N	N / D1 D1 / N	N / C1 C1 / N	N / C1 C1 / N	N / C1 C1 / N
36 37 38 39	N / C1 C1 / N C1 / N N	N	N N / C1 N / C 1 / N N	N / C1 C1 / N	E 2	N N / E2 N / E 2 / N E2 N	N / C1 C1 / N	N / C1 C1 / N
40 41 42 43	N / C1 C1 / N C1 / N N	N C1 / N N / N / N C1 / N N	N	N / C1 N / C1 C1 / N	E 2	E 2	N N / E2 N / E 2 / N E2 N	N / C1 C1 / N
44 45 46 47	N / N C1 / N N / N	N / C1 C1 / N C1 / N N	N / C1 C1 / N C1 / N N	N	F 2	E 2	E 2	N / D1 N / D1 D1 / N
48 49 50 51	N / D1 D1 / N D1 / N	E 3	E 3	F 3	N	N / C1 N / C1 C1 / N	N / C1 C1 / N	N / C1 C1 / N
52 53 54 55	N / C1 C1 / N C1 / N	N E3 / N N / E 3 / N E3 / N N	E 3	E 3	N / C1 C1 / N C1 / N	N	N N / C1 N / C 1 / N	N / C1 N / C1 C1 / N.
56 57 58 59	N / C1 C1 / N C1 / N	N / C1 C1 / N C1 / N N	N E3 / N N / N E3 / N N	E 3	N / C1 C1 / N C1 / N	N C1 / N N / C 1 / N C1 / N N	N	N / C1 N / C1 C1 / N
60 61 62 63	N / N C1 / N N / N	N / C1 C1 / N C1 / N N	N / C1 C1 / N C1 / N N	N / D1 D1 / N D1 / N	N / N C1 / N N / N	N / C1 C1 / N C1 / N	N / C1 C1 / N C1 / N	N

FIG. 34

SYMBOL	FORMULAE
N	G_n=B, n=1
C_{Jh}	G_n=B+2T{V>=6}, n=1, Jh=1
D_{Jh}	G_n=B+2T{V>=4} G_n=G_{n-1} n=1～Nmax (V) Nmax (V)=1+{V>=4}+{V>=10}, Jh=1
E_{Jh}	G_n=A+4T{V>=3} G_n=G_{n-1} n=1～Nmax (V) Nmax (V)=2+{V>=5}+{V>=10}, Jh=1+{T>0} +2{T<0}
F_{Jh}	G_1=A+12T{V=1}+4T{OR (V=2, V>=8)}+8T{AND (V>=3, V<=7)} G_2=A-4T{OR (V=4, V=5)} G_n=G_{n-1} n=1～Nmax (V) Nmax (V)=1+{V>=2}+{V>=6}+{V>=10}, Jh=1+{T>0} +2{T<0}

A:GRAY LEVEL VALUE OF FOCUSED PIXEL
B:GRAY LEVEL VALUE OF PIXEL ADJACENT IN MOTION DIRECTION
V:ABSOLUTE VALUE OF MOTION SPEED [PIXEL/FIELD]
Jh:REFERENTIAL NUMERAL OF REDUNDANCY SIGNAL PATTERN OF
CORRECTION SIGNAL TO BE INSERTED
T=(B-A)/|B-A|:INCREASE/DECREASE OF CHANGE OF GRAY LEVEL VALUE IN MOTION DIRECTION
(INCREASE:POSITIVE VALUE, DECREASE:NEGATIVE VALUE)
Results of logical operations described in {} indicate True=1 or False=0.

FIG. 35

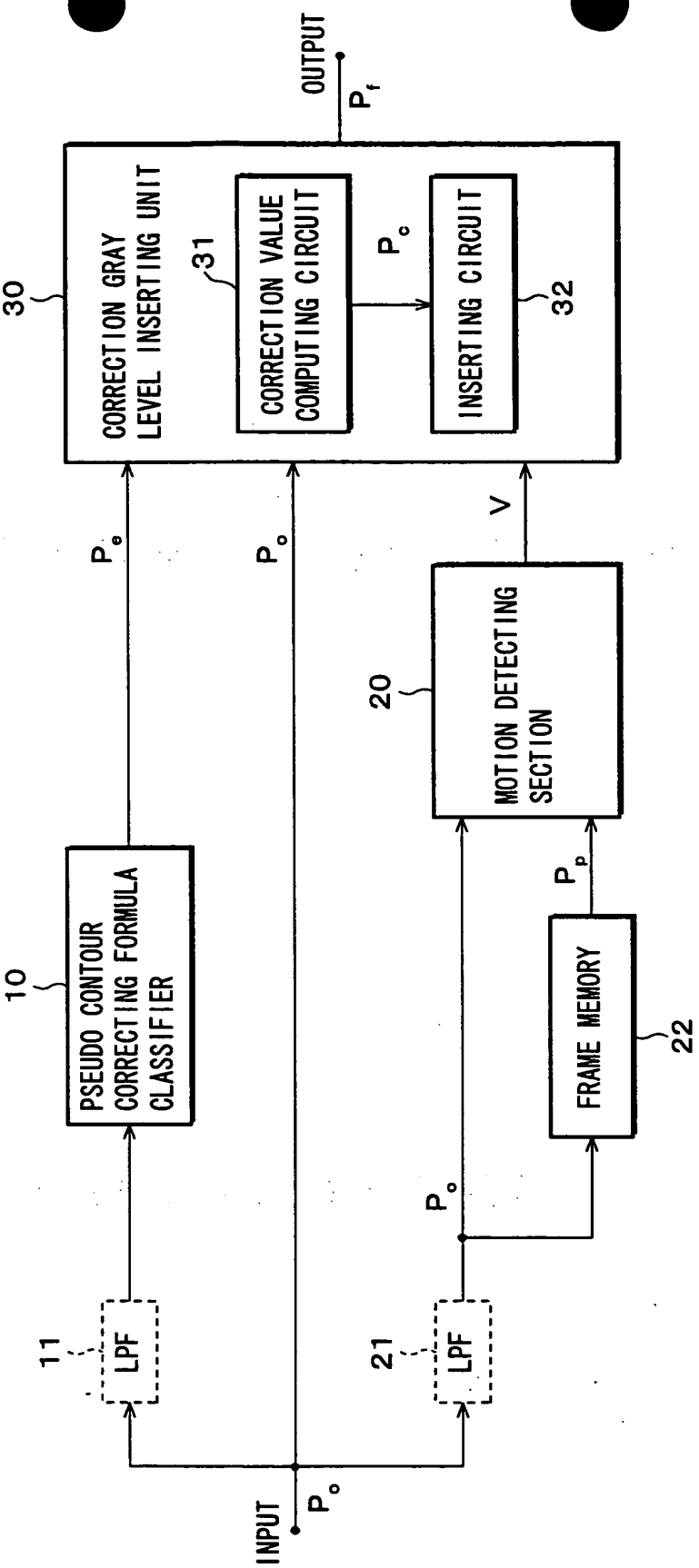

OUTPUT
P_f
30
CORRECTION GRAY LEVEL INSERTING UNIT
31
CORRECTION VALUE COMPUTING CIRCUIT
P_c
INSERTING CIRCUIT
32
P_e
P_o
V
20
MOTION DETECTING SECTION
10
PSEUDO CONTOUR CORRECTING FORMULA CLASSIFIER
P_p
FRAME MEMORY
22
P_o
11
LPF
21
LPF
INPUT
P_o

FIG. 36

NUMERAL Gr.	CORRECTING FORMULA Gr.
0	N
1	E (1)
2	C (Jh)
3	D (Jh)
4	F (Jh)
5	F (Jh) *
6	F (Jh) **
7	f (Jh)
8	f (Jh) *
9	f (Jh) **

N represents non-correction.
Numeral in () represents a referential numeral of a redundancy signal pattern used.
Jh is 2 or 3.

FIG. 37

NUMERAL Gr.	CORRECTING FORMULA Gr.
0	N
1	C 1
2	D 1
3	E_{Jh}
4	F_{Jh}

N represents non-correction.
Jh is 2 or 3.

FIG. 38

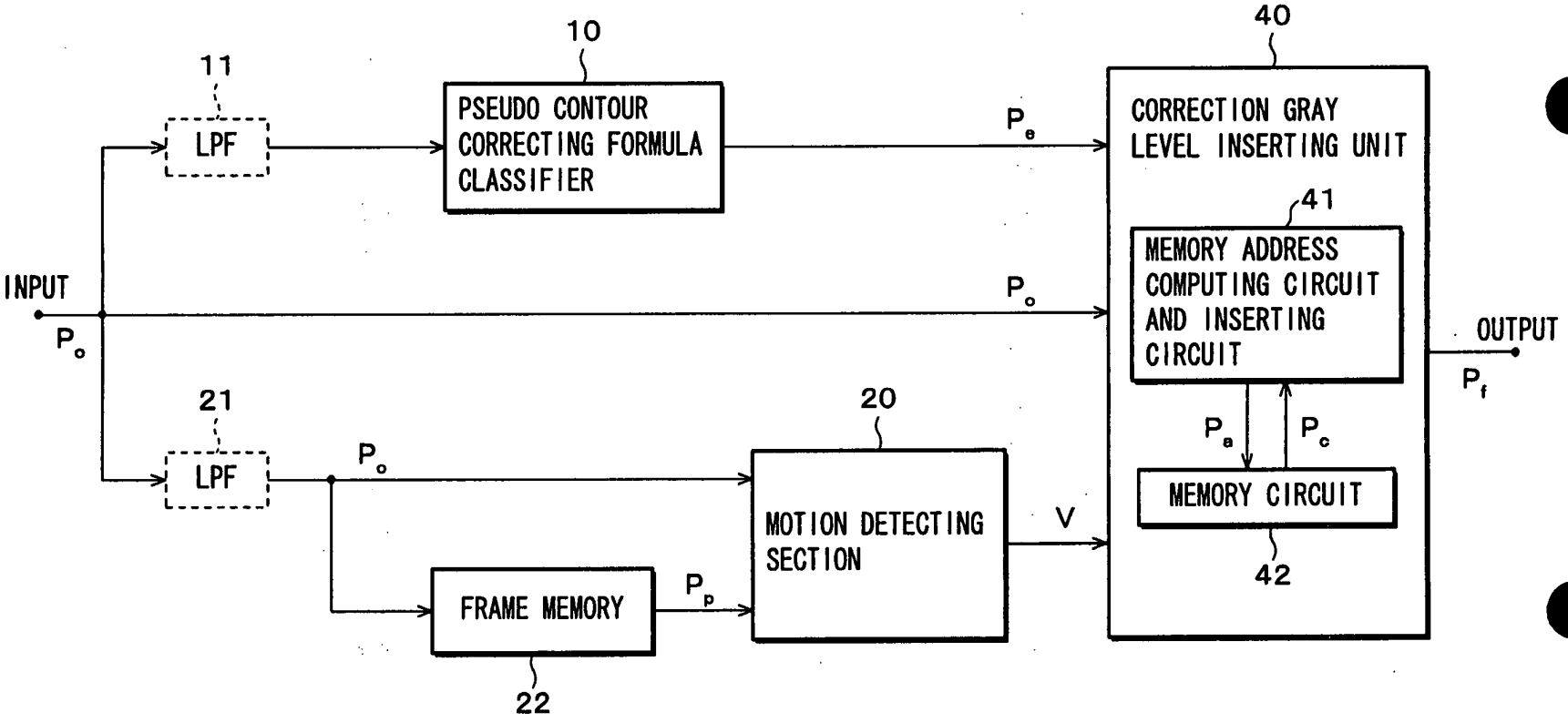

10
11
40
PSEUDO CONTOUR CORRECTING FORMULA CLASSIFIER
LPF
P_e
CORRECTION GRAY LEVEL INSERTING UNIT
41
MEMORY ADDRESS COMPUTING CIRCUIT AND INSERTING CIRCUIT
INPUT
P_o
P_o
OUTPUT
P_f
21
20
LPF
P_o
MOTION DETECTING SECTION
V
P_a
P_c
MEMORY CIRCUIT
FRAME MEMORY
P_p
42
22

FIG. 39

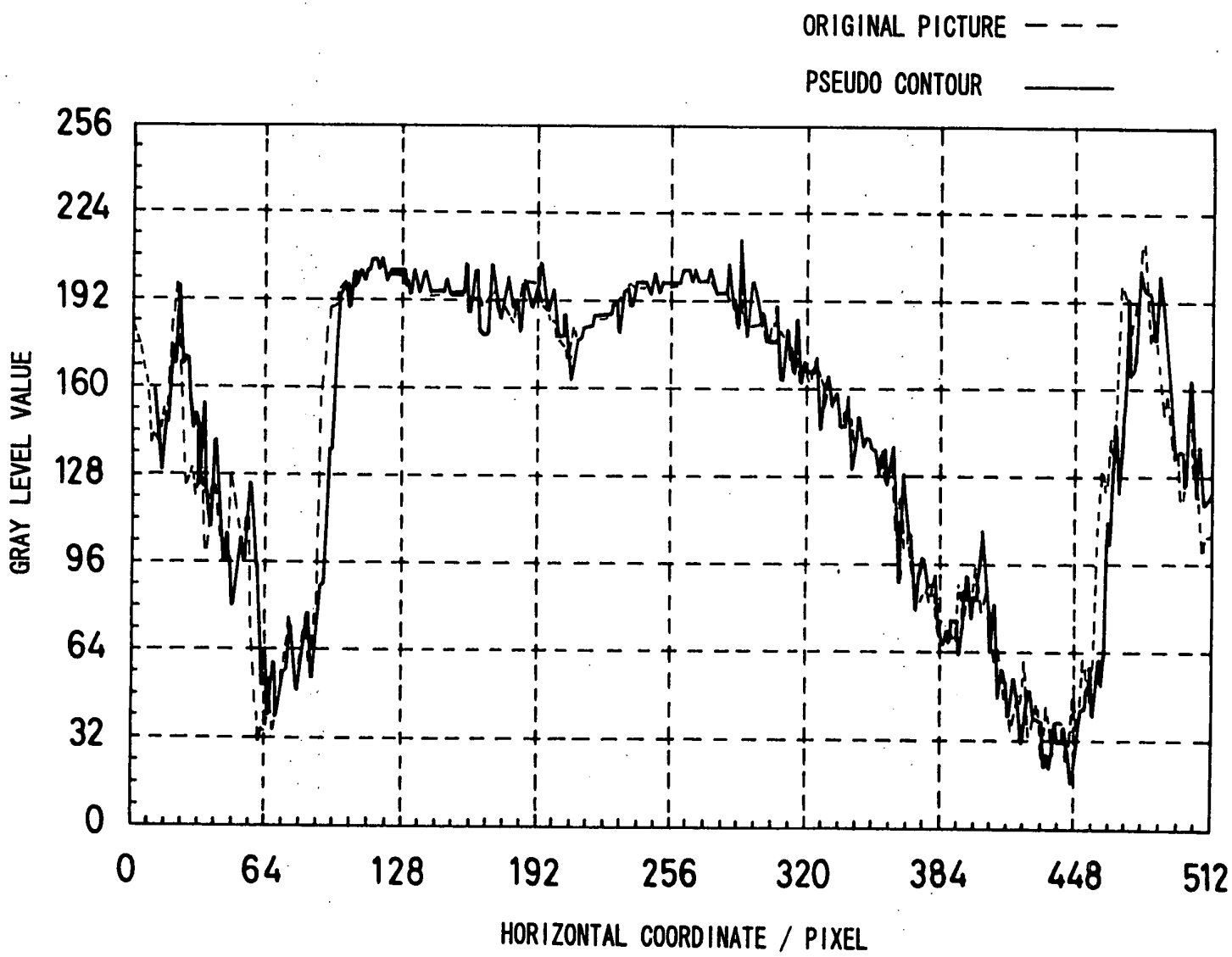

ORIGINAL PICTURE
PSEUDO CONTOUR
GRAY LEVEL VALUE
256
224
192
160
128
96
64
32
0
0
64
128
192
256
320
384
448
512
HORIZONTAL COORDINATE / PIXEL

FIG.40

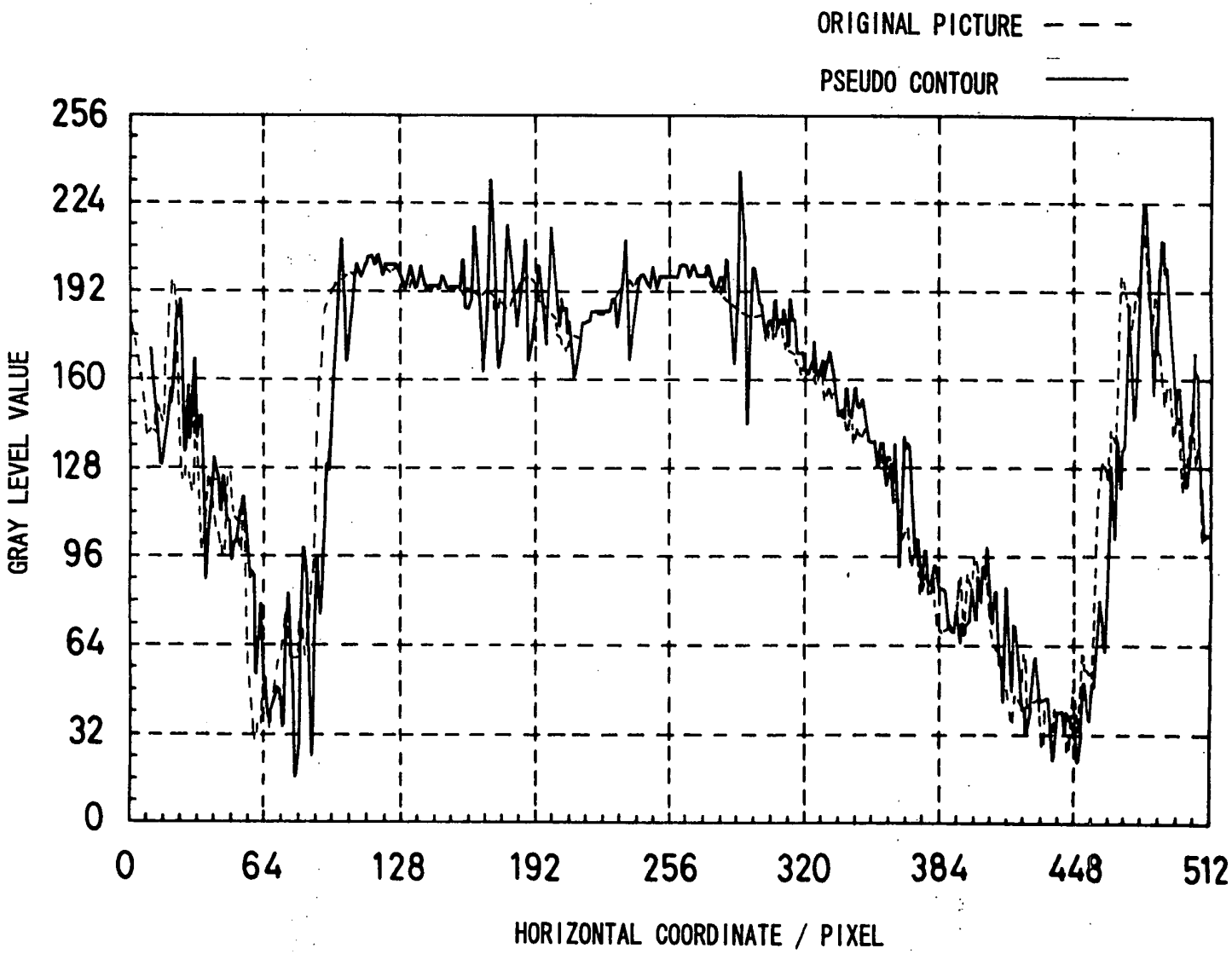

ORIGINAL PICTURE
PSEUDO CONTOUR
GRAY LEVEL VALUE
256
224
192
160
128
96
64
32
0
0
64
128
192
256
320
384
448
512
HORIZONTAL COORDINATE / PIXEL

FIG. 41

COMPUTATION RESULT OF CORRECTED RAMP-WAVEFORM MOTION PICTURE (TIME DIVISION 1:8:4:8)

FIG. 42

COMPUTATION RESULT OF NON-CORRECTED RAMP-WAVEFORM MOTION PICTURE (TIME DIVISION 1:8:4:8)

FIG. 43

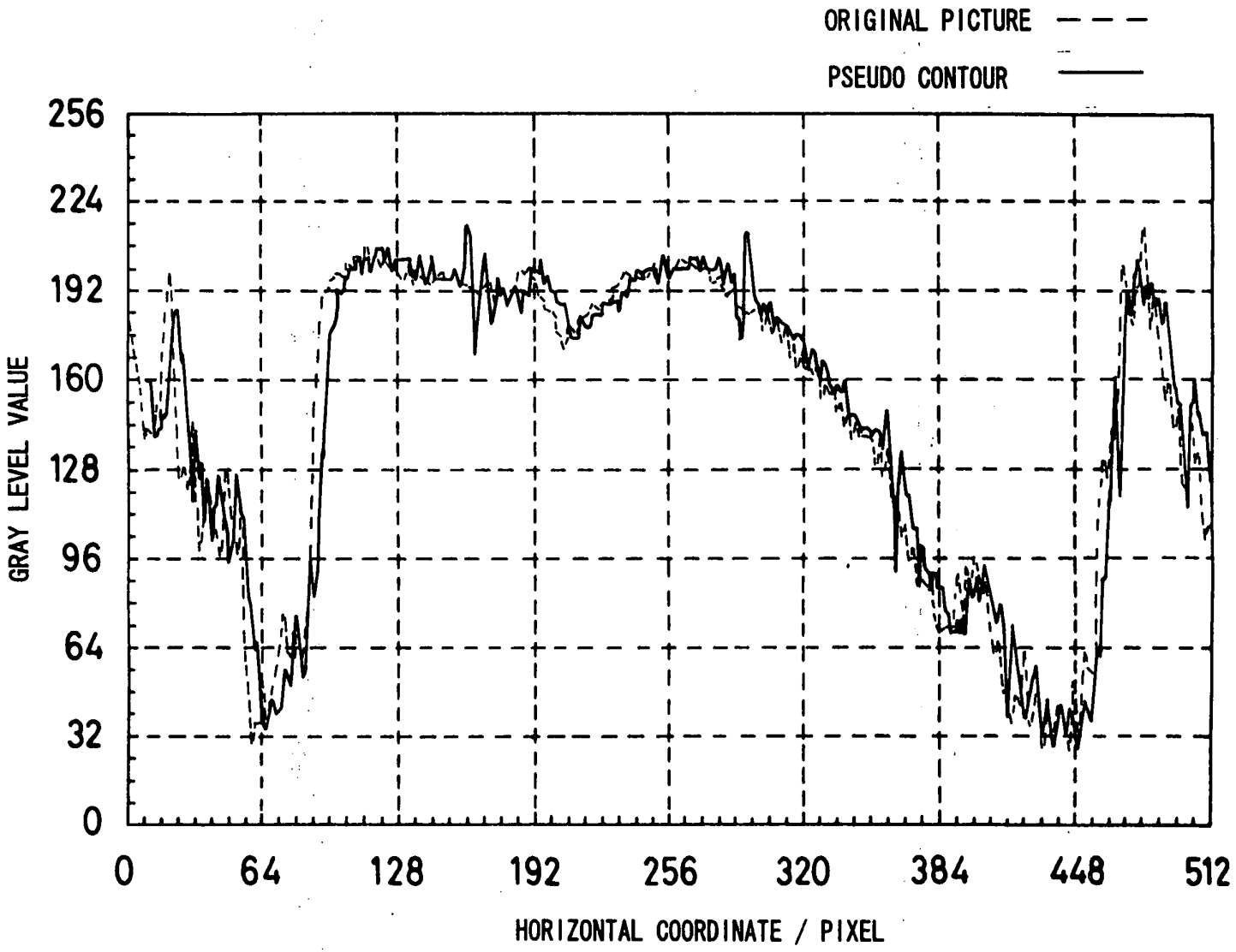

ORIGINAL PICTURE
PSEUDO CONTOUR
GRAY LEVEL VALUE
256
224
192
160
128
96
64
32
0
0
64
128
192
256
320
384
448
512
HORIZONTAL COORDINATE / PIXEL

FIG. 44

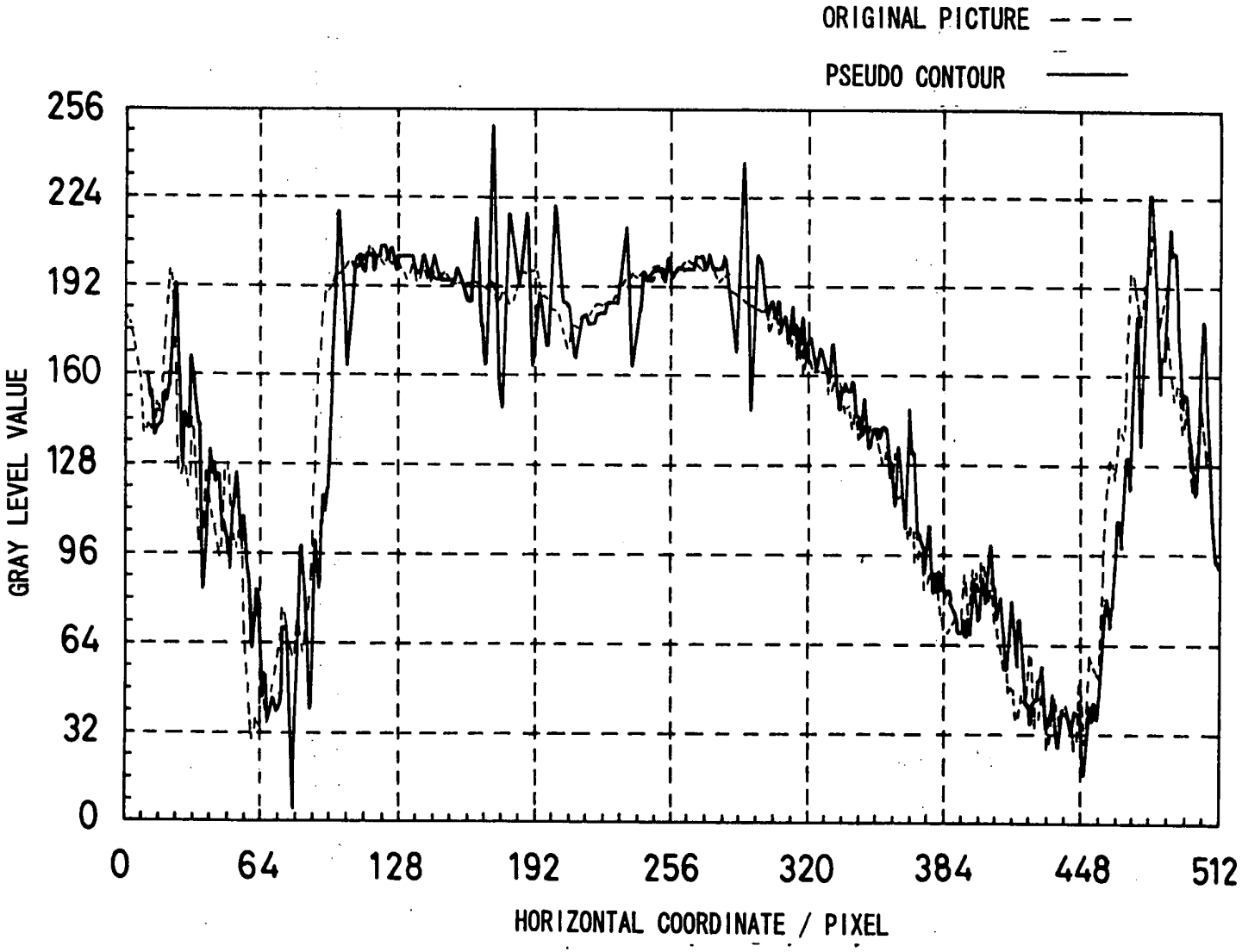

ORIGINAL PICTURE
PSEUDO CONTOUR
GRAY LEVEL VALUE
256
224
192
160
128
96
64
32
0
0
64
128
192
256
320
384
448
512
HORIZONTAL COORDINATE / PIXEL

FIG. 45

COMPUTATION RESULT OF CORRECTED RAMP-WAVEFORM MOTION PICTURE (TIME DIVISION 8:4:1:8)

FIG. 46

COMPUTATION RESULT OF NON-CORRECTED RAMP-WAVEFORM MOTION PICTURE (TIME DIVISION 8:4:1:8)

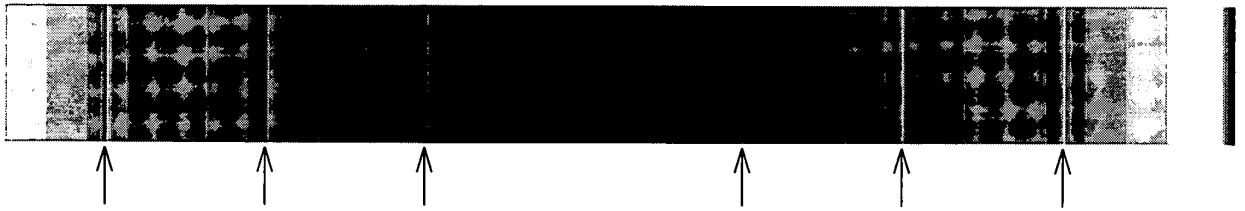


FIG. 47

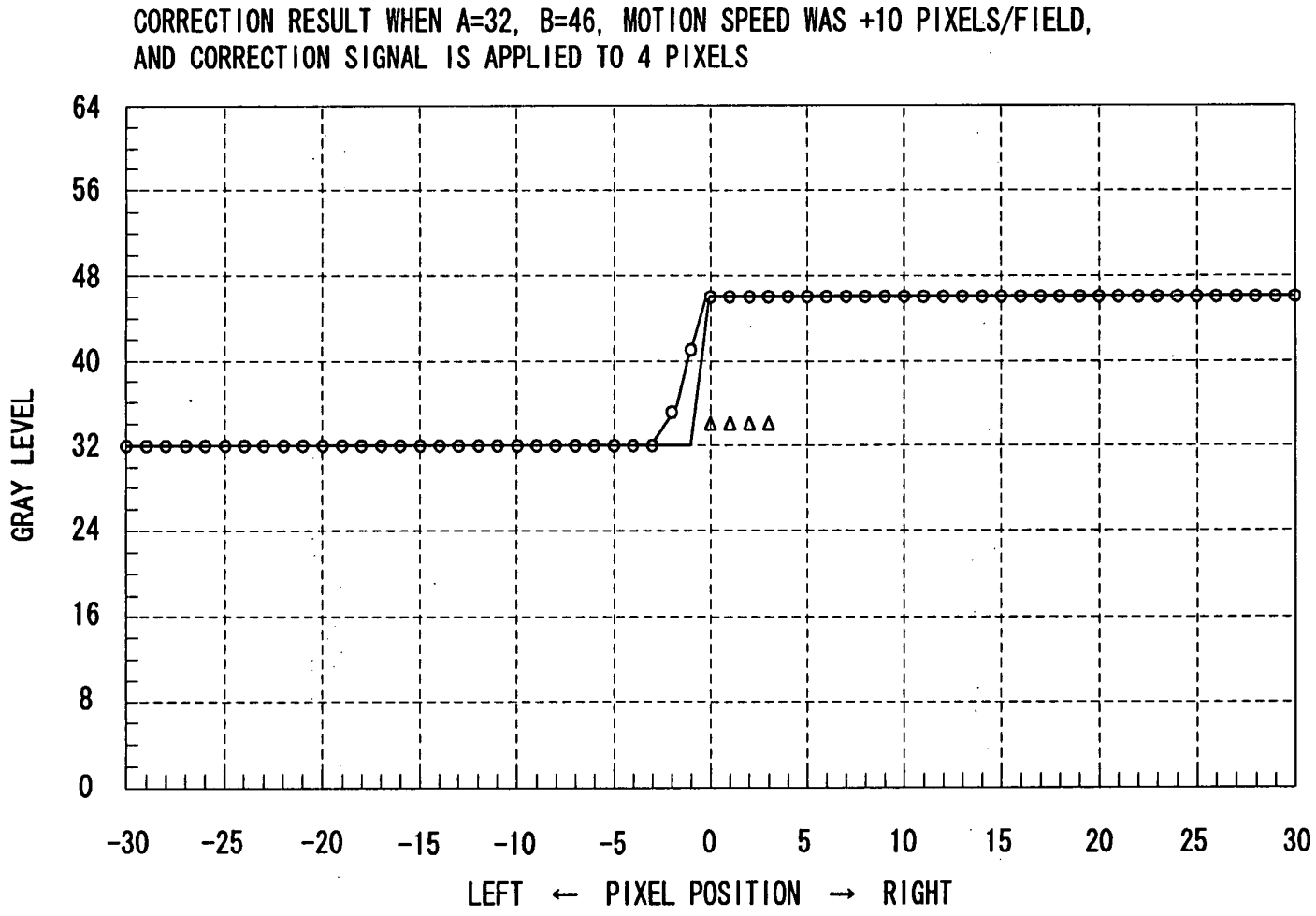

CORRECTION RESULT WHEN A=32, B=46, MOTION SPEED WAS +10 PIXELS/FIELD,
AND CORRECTION SIGNAL IS APPLIED TO 4 PIXELS
64
56
48
40
32
24
16
8
0
GRAY LEVEL
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
LEFT ← PIXEL POSITION → RIGHT
SOLID LINE : GRAY LEVEL VALUE OF PICTURE
○ : GRAY LEVEL VALUE OF PICTURE WHEN MOVING
△ : CORRECTION GRAY LEVEL VALUE

FIG. 48

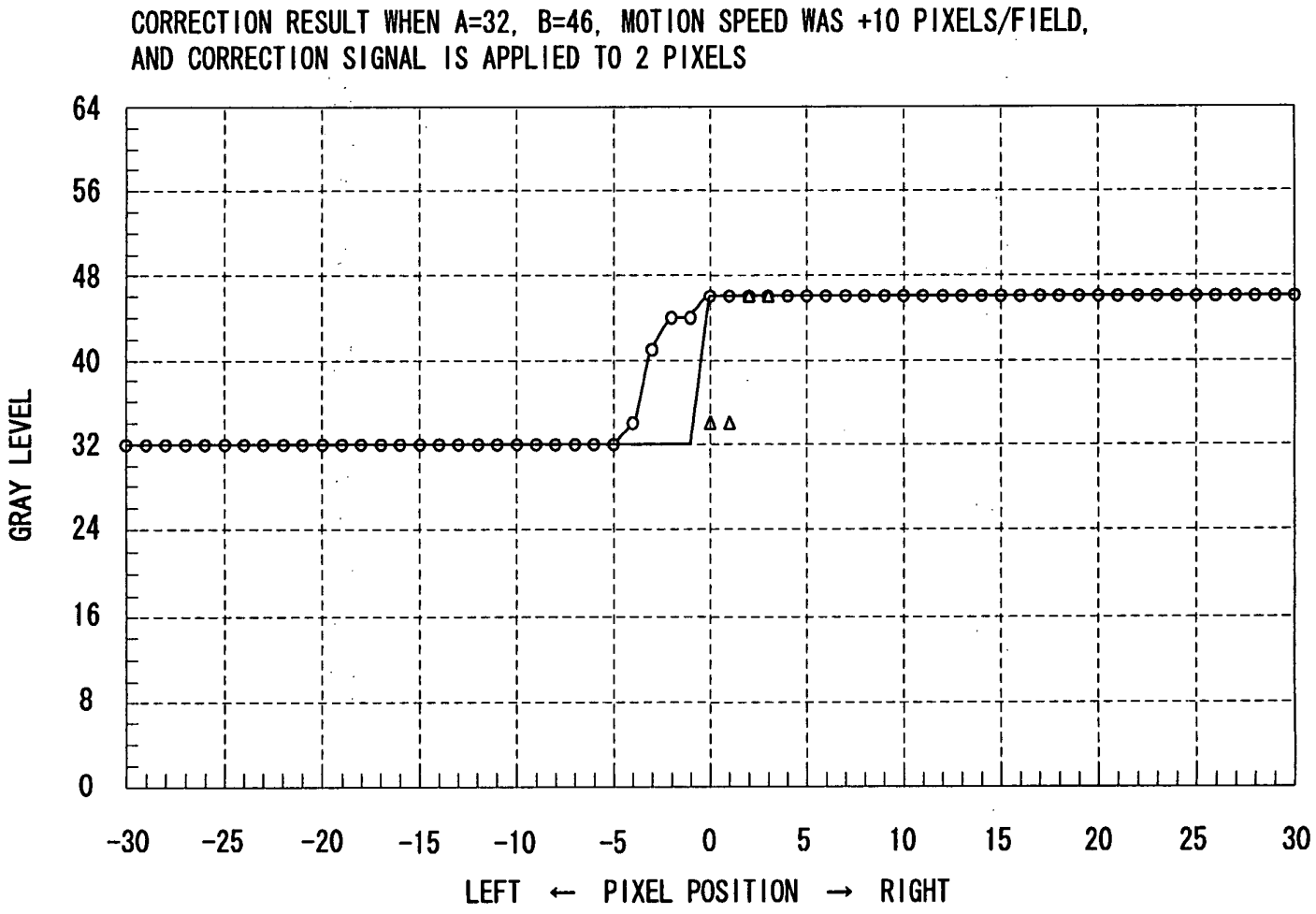

CORRECTION RESULT WHEN A=32, B=46, MOTION SPEED WAS +10 PIXELS/FIELD,
AND CORRECTION SIGNAL IS APPLIED TO 2 PIXELS
GRAY LEVEL
64
56
48
40
32
24
16
8
0
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
LEFT ← PIXEL POSITION → RIGHT
SOLID LINE : GRAY LEVEL VALUE OF PICTURE
○ : GRAY LEVEL VALUE OF PICTURE WHEN MOVING
△ : CORRECTION GRAY LEVEL VALUE

FIG. 49

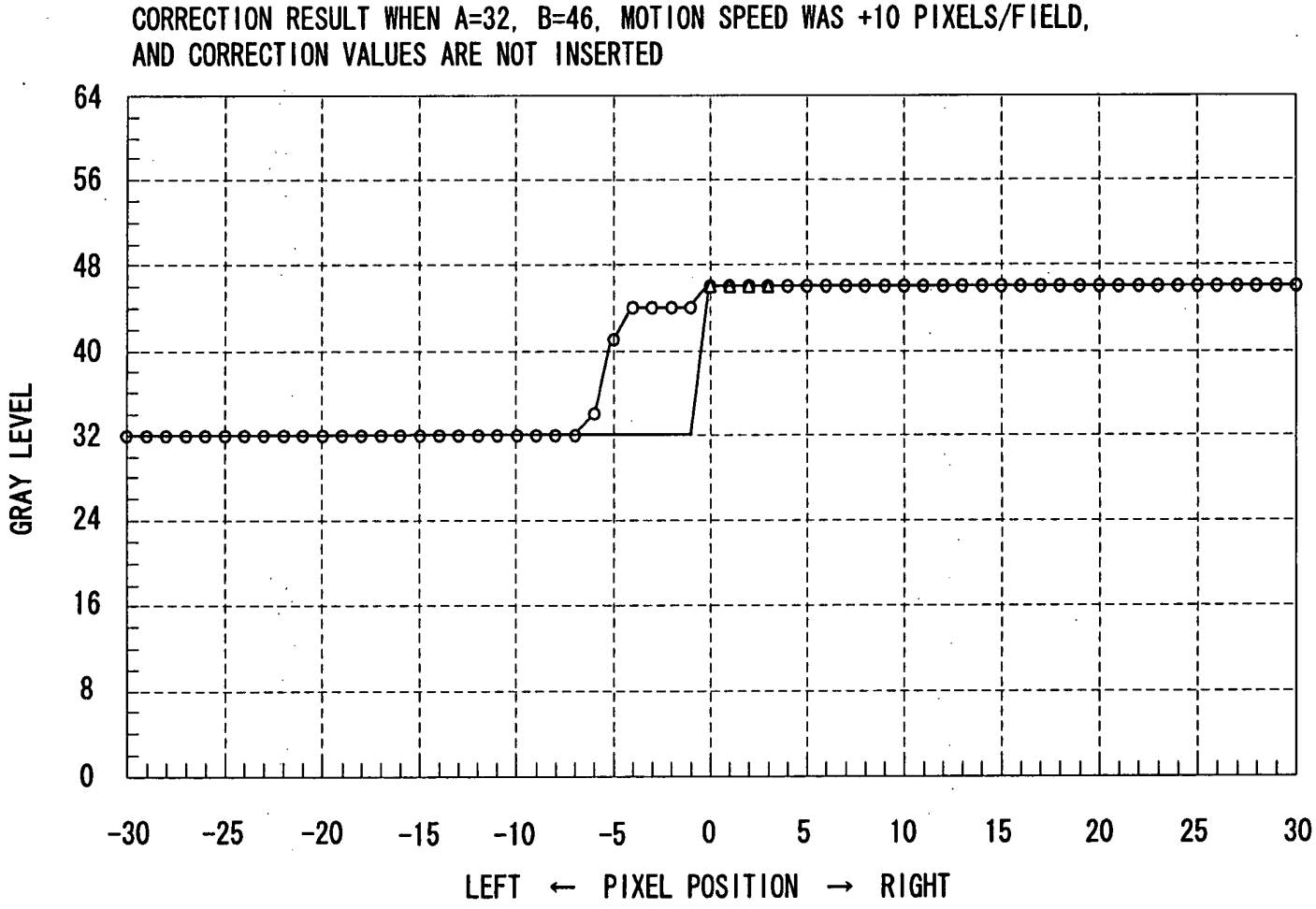

CORRECTION RESULT WHEN A=32, B=46, MOTION SPEED WAS +10 PIXELS/FIELD,
AND CORRECTION VALUES ARE NOT INSERTED
GRAY LEVEL
64
56
48
40
32
24
16
8
0
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
LEFT ← PIXEL POSITION → RIGHT
SOLID LINE : GRAY LEVEL VALUE OF PICTURE
○ : GRAY LEVEL VALUE OF PICTURE WHEN MOVING
△ : CORRECTION GRAY LEVEL VALUE

FIG. 50

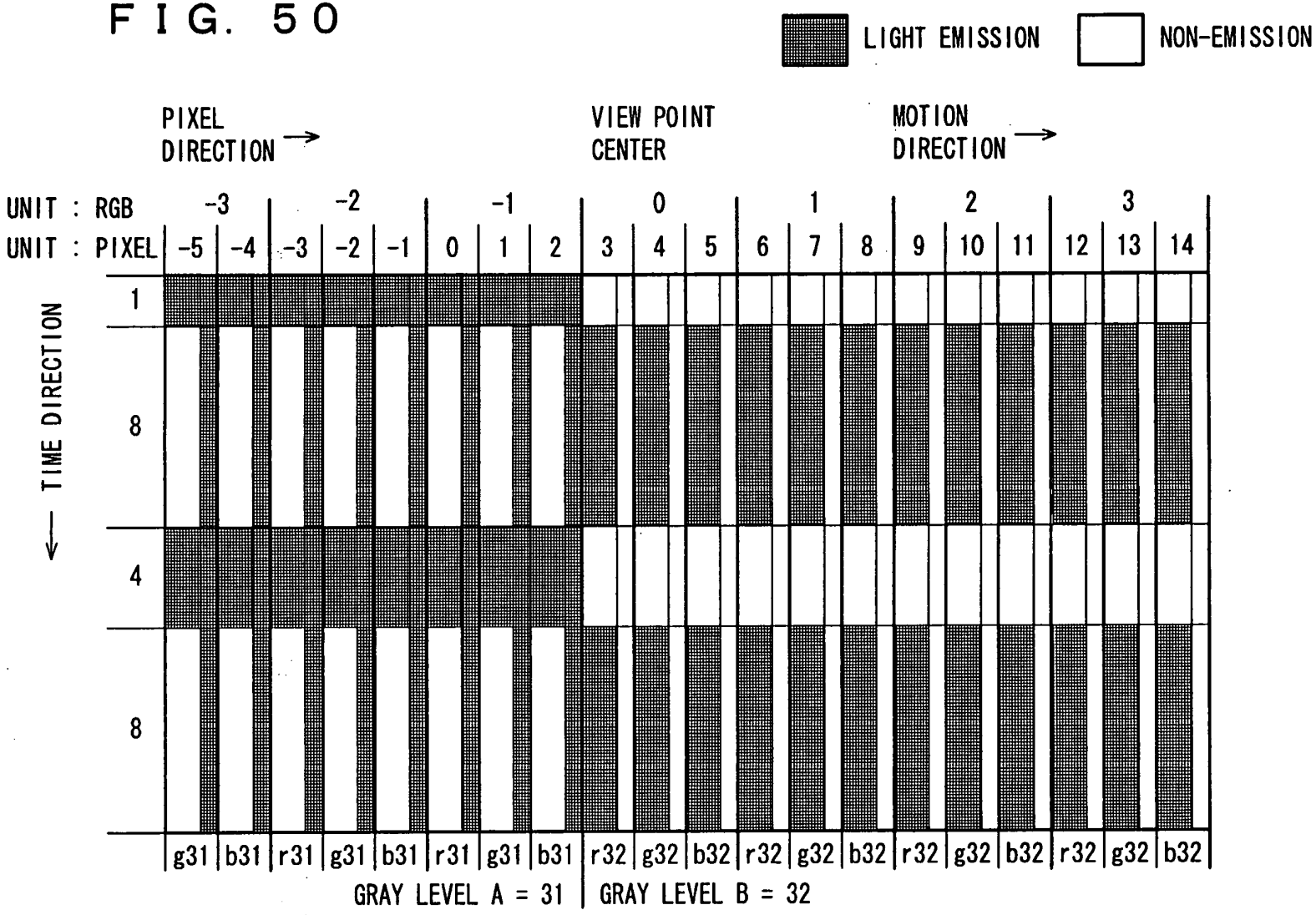

LIGHT EMISSION
NON-EMISSION
PIXEL DIRECTION
VIEW POINT CENTER
MOTION DIRECTION
UNIT : RGB
UNIT : PIXEL
TIME DIRECTION
1
8
4
8
GRAY LEVEL A = 31
GRAY LEVEL B = 32

FIG. 51

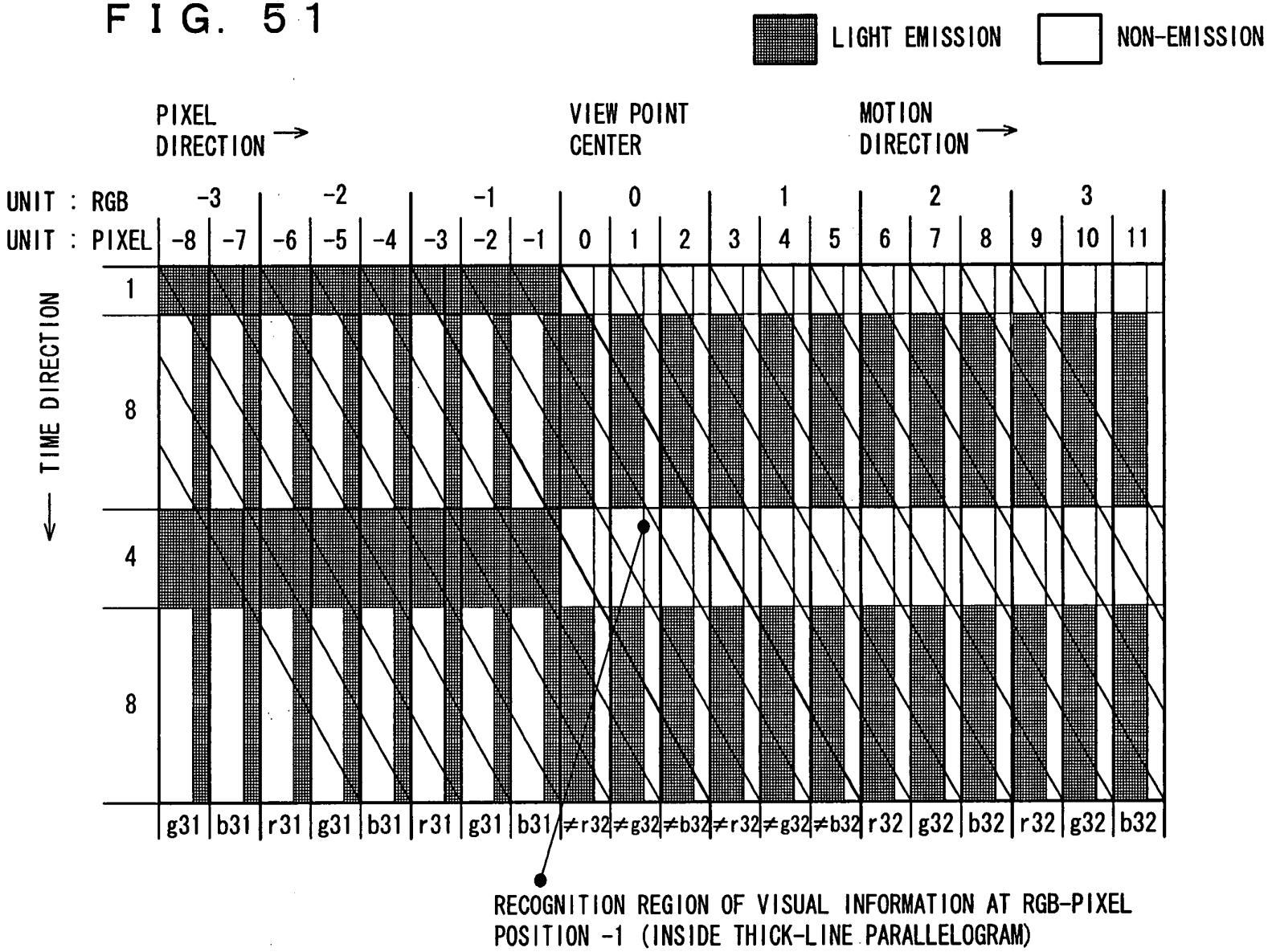

LIGHT EMISSION
NON-EMISSION
PIXEL DIRECTION
VIEW POINT CENTER
MOTION DIRECTION
UNIT : RGB
UNIT : PIXEL
TIME DIRECTION
1
8
4
8
g31 b31 r31 g31 b31 r31 g31 b31 ≠r32 ≠g32 ≠b32 ≠r32 ≠g32 ≠b32 r32 g32 b32 r32 g32 b32
RECOGNITION REGION OF VISUAL INFORMATION AT RGB-PIXEL POSITION -1 (INSIDE THICK-LINE PARALLELOGRAM)

FIG. 52

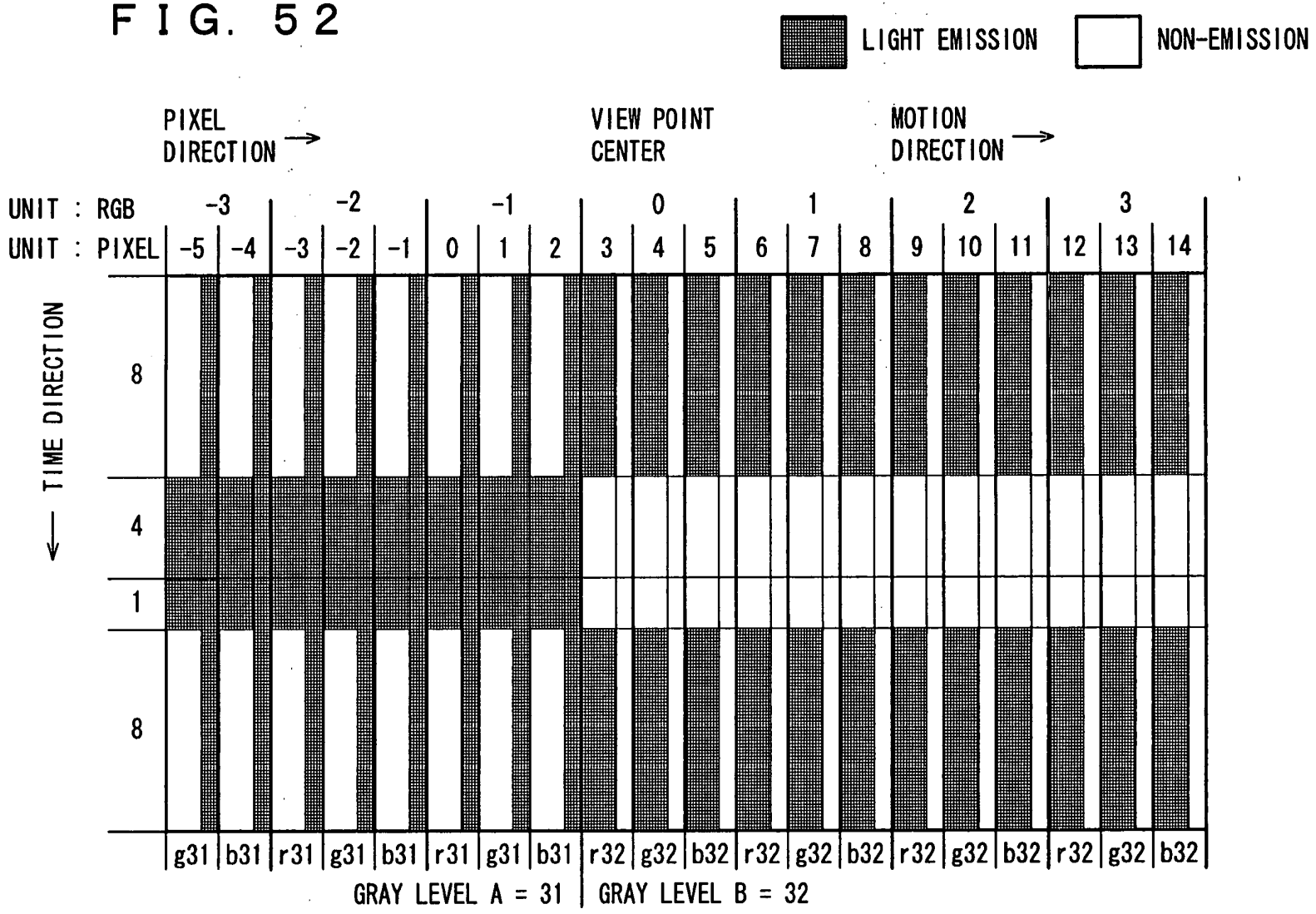

LIGHT EMISSION
NON-EMISSION
PIXEL DIRECTION
VIEW POINT CENTER
MOTION DIRECTION
UNIT : RGB
UNIT : PIXEL
TIME DIRECTION
8
4
1
8
g31 b31 r31 g31 b31 r31 g31 b31 r32 g32 b32 r32 g32 b32 r32 g32 b32 r32 g32 b32
GRAY LEVEL A = 31
GRAY LEVEL B = 32

FIG. 53

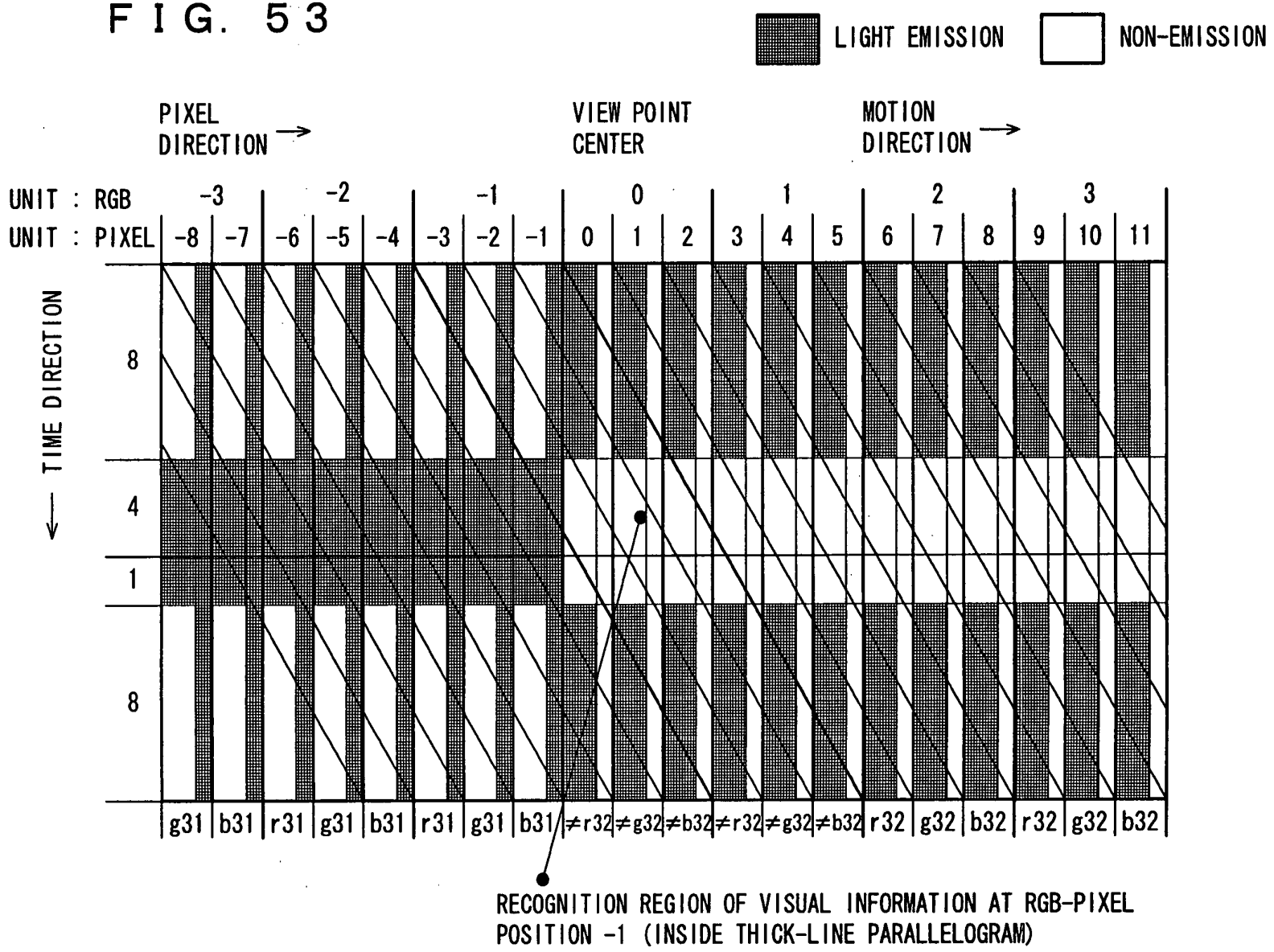

LIGHT EMISSION
NON-EMISSION
PIXEL DIRECTION
VIEW POINT CENTER
MOTION DIRECTION
UNIT : RGB
UNIT : PIXEL
TIME DIRECTION
RECOGNITION REGION OF VISUAL INFORMATION AT RGB-PIXEL POSITION -1 (INSIDE THICK-LINE PARALLELOGRAM)

FIG. 54(a)

x DIRECTION →

↓ y DIRECTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
5	G	G	G	G	63	62	61	60	59	58	57	56	71	79	87	95	G	G	G	G	G	G	G
6	G	G	G	G	36	37	38	39	40	41	42	55	70	78	86	94	G	G	G	G	G	G	G
7	G	G	G	G	35	34	33	32	31	30	43	54	69	77	85	93	G	G	G	G	G	G	G
8	G	G	G	G	16	17	18	19	20	29	44	53	68	76	84	92	G	G	G	G	G	G	G
9	G	G	G	G	15	14	13	12	21	28	45	52	67	75	83	91	G	G	G	G	G	G	G
10	G	G	G	G	4	5	6	11	22	27	46	51	66	74	82	90	G	G	G	G	G	G	G
11	G	G	G	G	3	2	7	10	23	26	47	50	65	73	81	89	G	G	G	G	G	G	G
12	G	G	G	G	0	1	8	9	24	25	48	49	64	72	80	88	G	G	G	G	G	G	G
13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
15	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

FIG. 54(b)

x DIRECTION →

↓ y DIRECTION	5	6	7	8	9	10	11	12	13	14	15	16
5											87	95
6										78	86	
7								54	69	77		
8							44	53				
9					21	28						
10			6	11	22							
11		2	7									
12	0	1										

FIG. 55 (a)

LOCAL COORDINATE	0	1	2	3	4	5	6	7	8	9	10	11
x COORDINATE	5	6	7	8	9	10	11	12	13	14	15	16
EXTRACTED PIXEL	0	2	7	11	21	28	44	53	69	78	86	95
y COORDINATE	12	11	11	10	9	9	8	8	7	6	6	5

HORIZONTAL CONTRIBUTION COMPONENT

FIG. 55 (b)

LOCAL COORDINATE	0	1	2	3	4	5	6	7
x COORDINATE	5	6	7	9	11	12	14	15
EXTRACTED PIXEL	0	2	6	21	44	54	78	87
y COORDINATE	12	11	10	9	8	7	6	5

VERTICAL CONTRIBUTION COMPONENT

FIG. 56 (a)

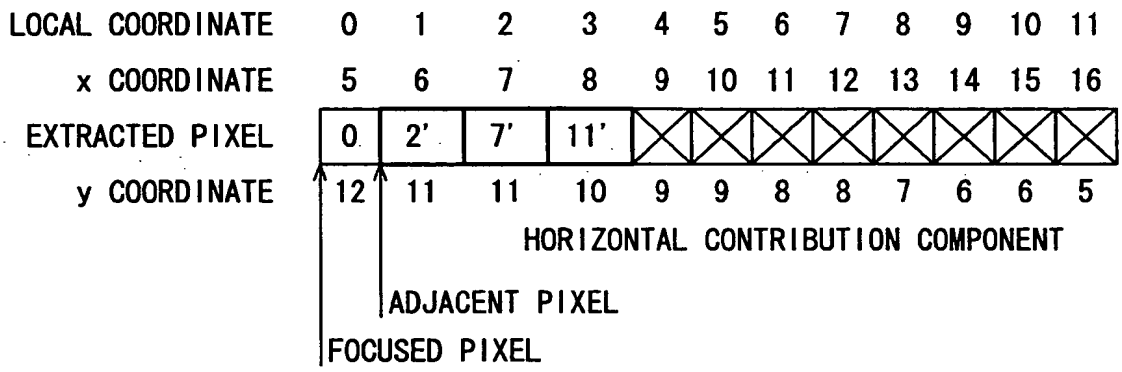


FIG. 56 (b)

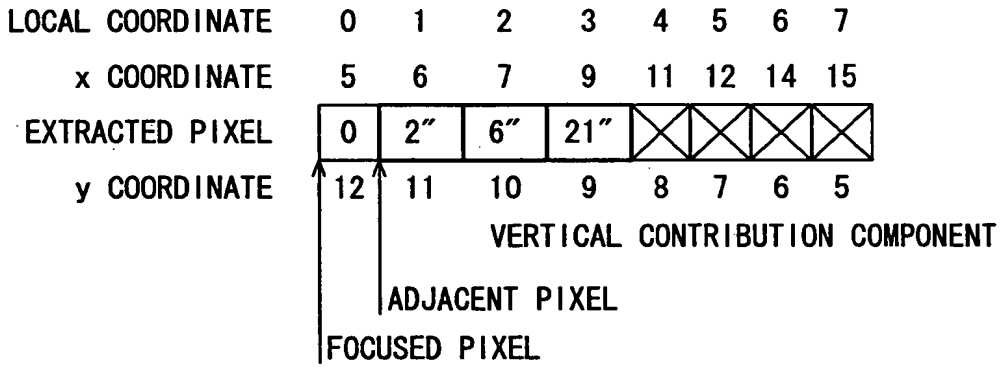


FIG. 57

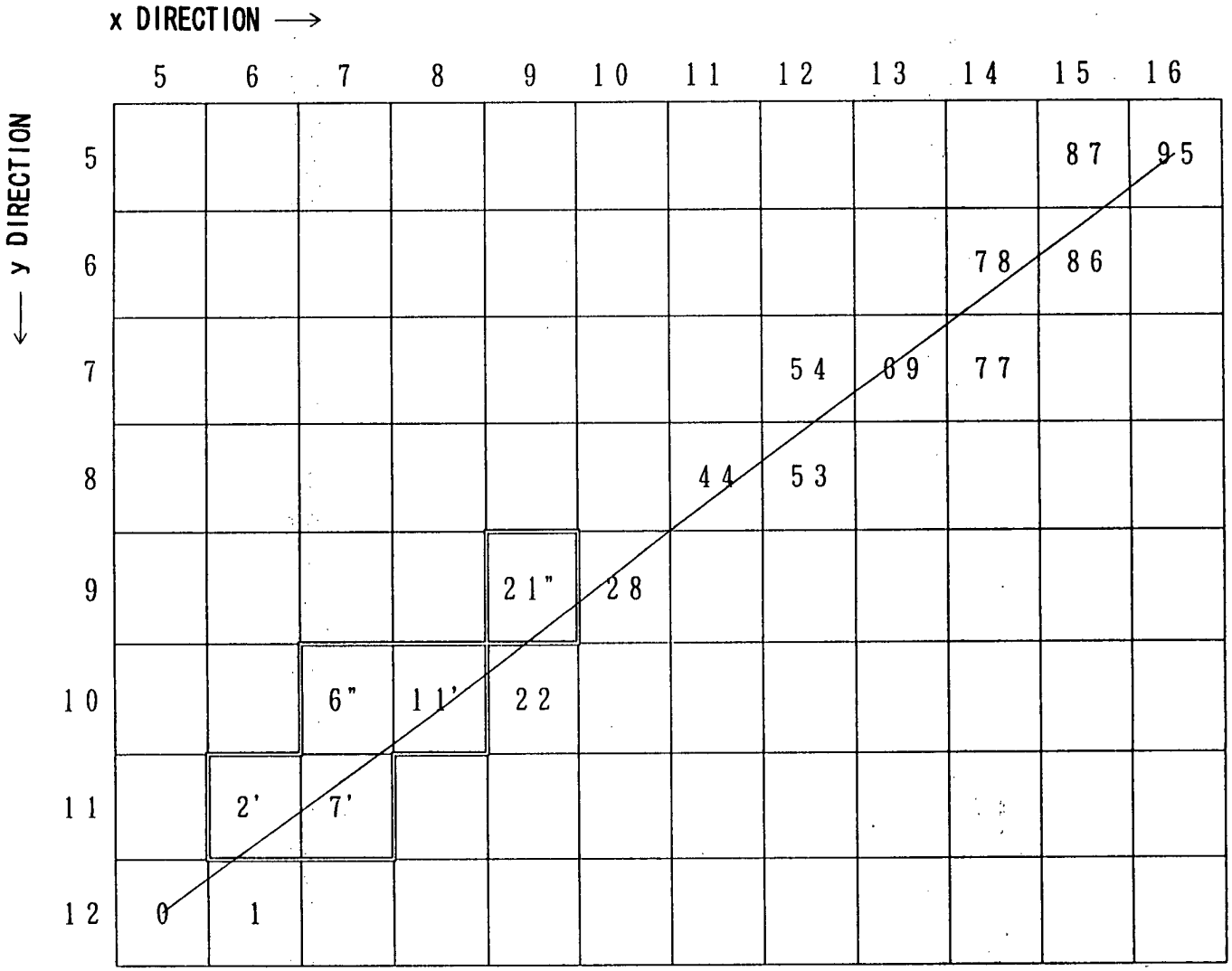

x DIRECTION
y DIRECTION
5 6 7 8 9 10 11 12 13 14 15 16
5 6 7 8 9 10 11 12
87
95
78
86
54
69
77
44
53
21"
28
6"
11'
22
2'
7'
0
1

FIG. 58

TEST PICTURE:STATIC STATE

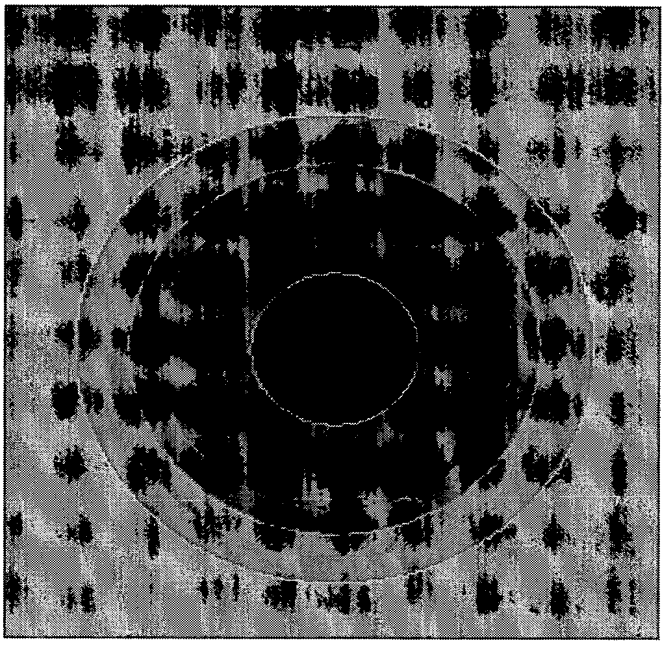


FIG. 59

TEST PICTURE:NON-CORRECTED RESULT

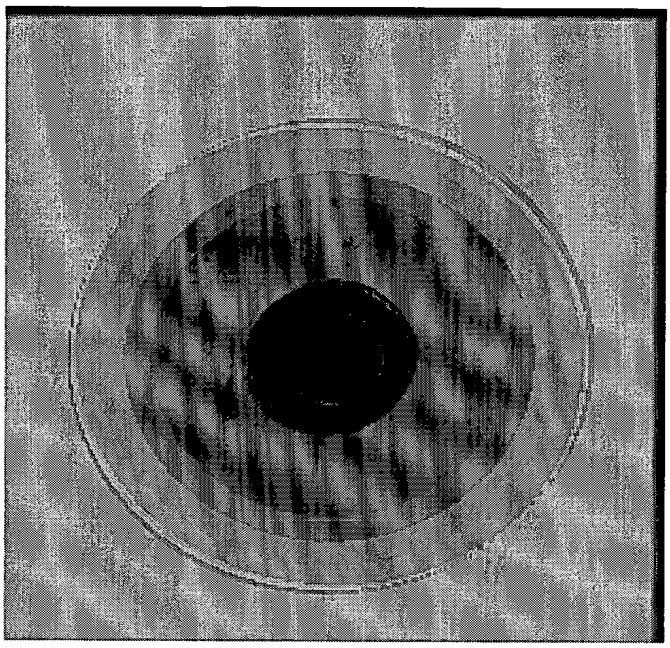


FIG. 60

TEST PICTURE:CORRECTED RESULT

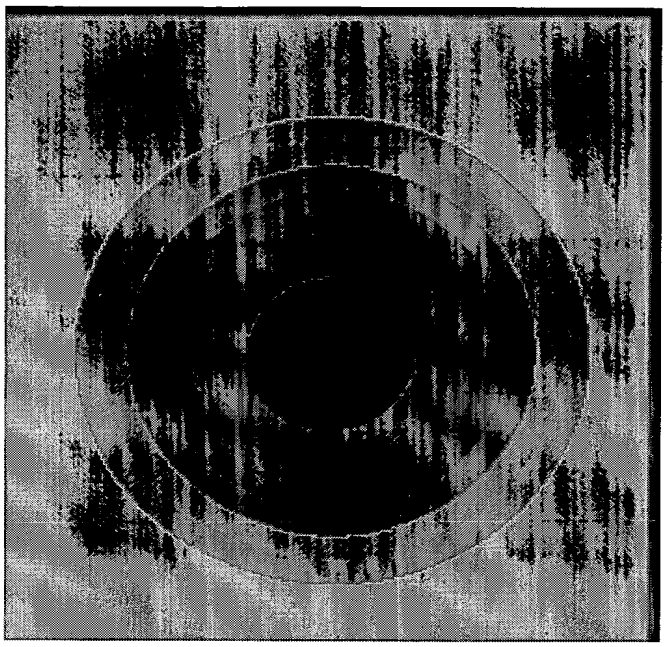


FIG. 61

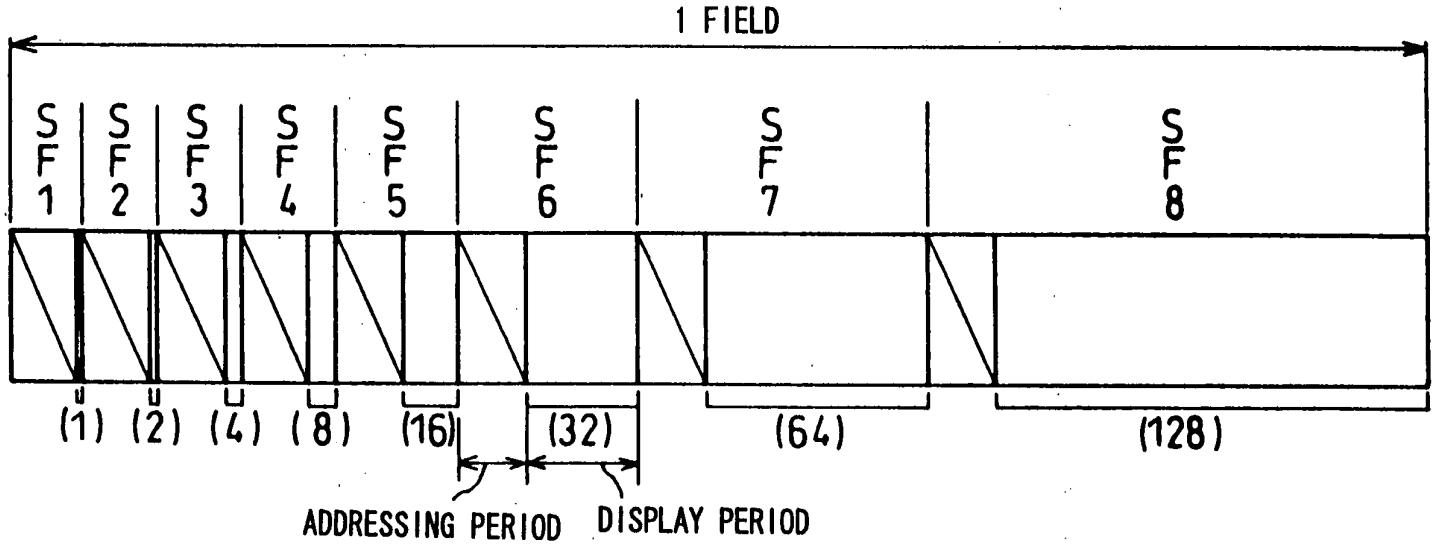

1 FIELD
SF1
SF2
SF3
SF4
SF5
SF6
SF7
SF8
(1)
(2)
(4)
(8)
(16)
(32)
(64)
(128)
ADDRESSING PERIOD
DISPLAY PERIOD

FIG. 62

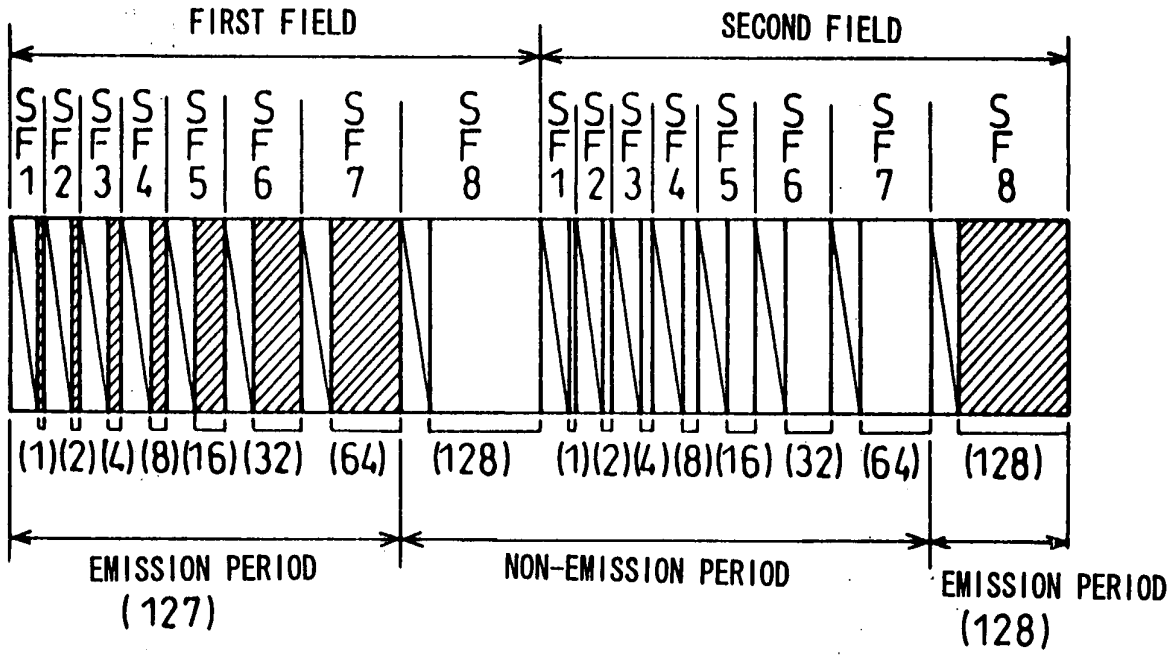

FIRST FIELD
SECOND FIELD
SF1
SF2
SF3
SF4
SF5
SF6
SF7
SF8
(1)
(2)
(4)
(8)
(16)
(32)
(64)
(128)
EMISSION PERIOD
(127)
NON-EMISSION PERIOD
EMISSION PERIOD
(128)

FIG. 63

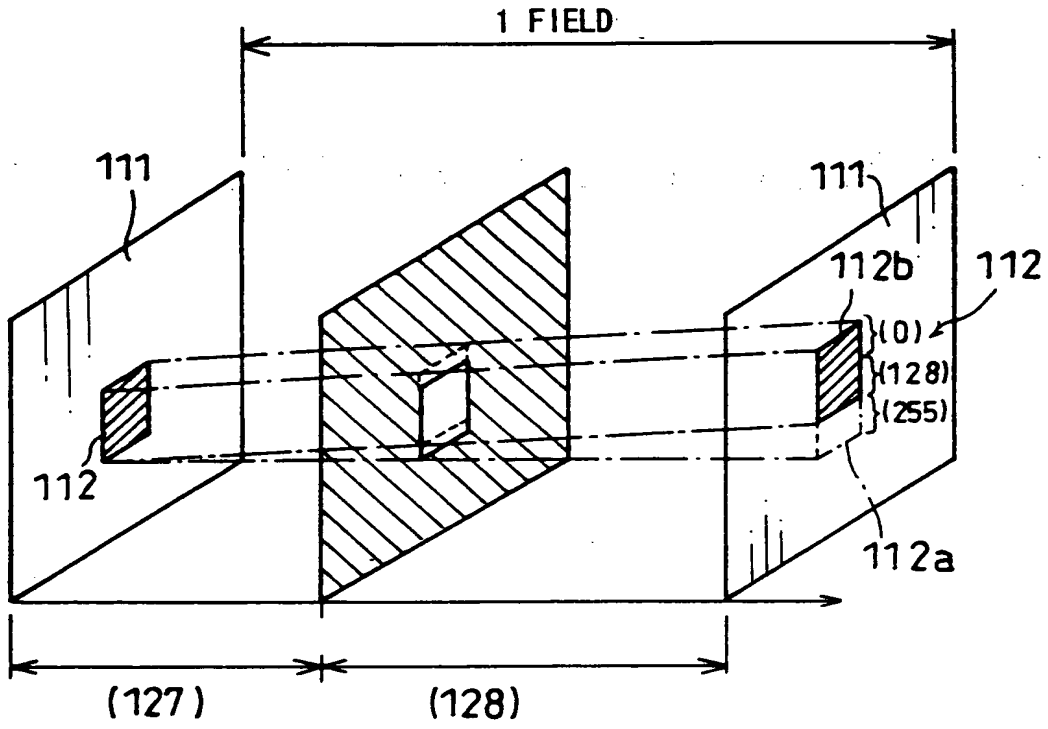


FIG. 64(a)

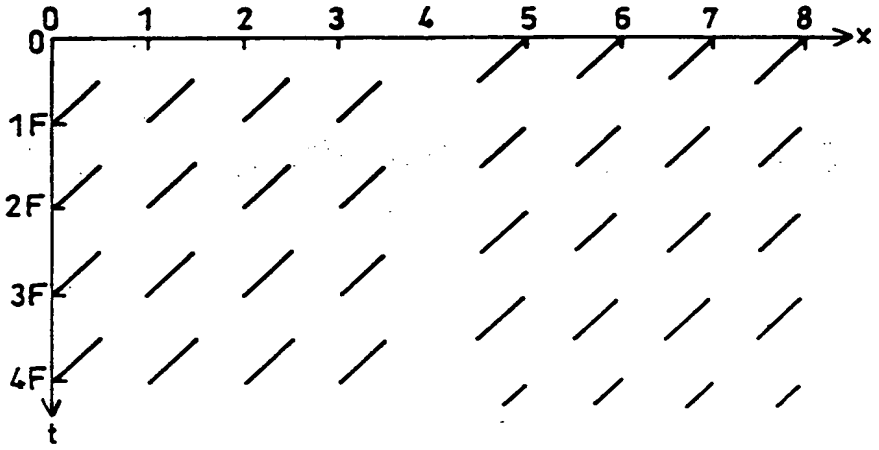


FIG. 64(b)

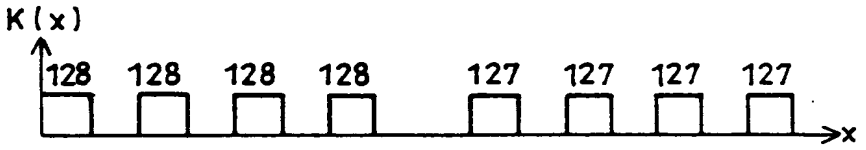


FIG. 64(c)

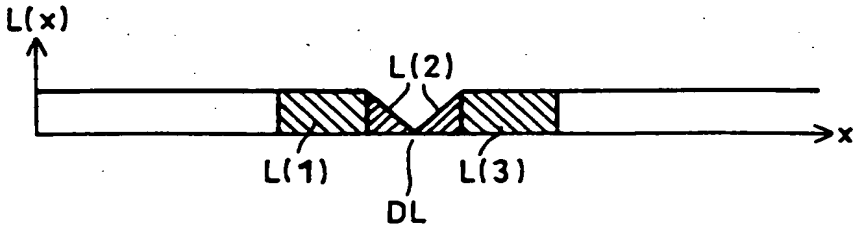


FIG. 65(a)

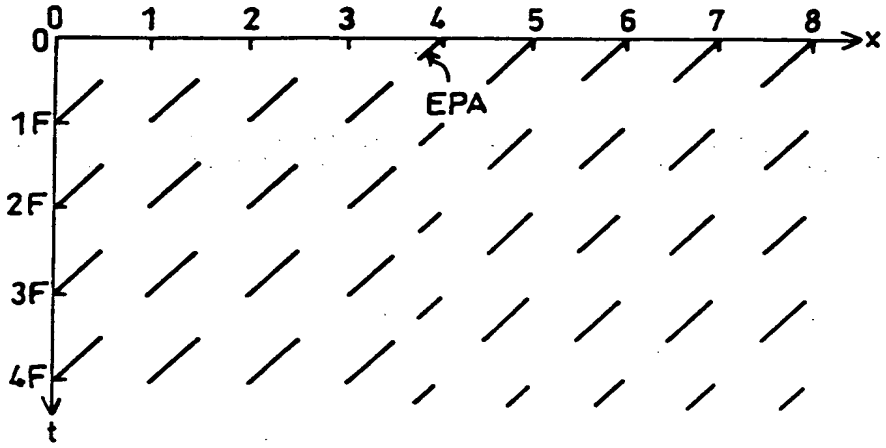


FIG. 65(b)

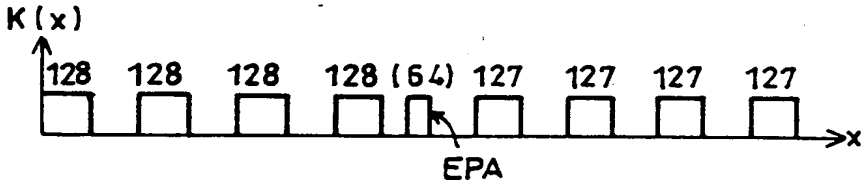


FIG. 65(c)

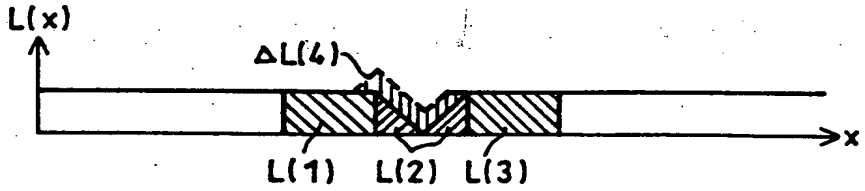


FIG. 66

NUMBER OF SUB-FIELD	SUB-FIELD					
	SF9	SF8	SF7	SF6	SF5	SF4～0
8	-	-	128	64	32	16, 8, 4, 2, 1
10	64	64	32	32	32	16, 8, 4, 2, 1
10	48	48	48	48	32	16, 8, 4, 2, 1